#hello my name is...

How a doctor with terminal cancer hopes to change the nature of the doctor-patient relationship

> PRESCRIBING GETTING IT RIGHT

ALSO INSIDE



ISSUE 13







Welcome to your FY

EVER wondered what proportion of medical graduates in the 1960s were female compared to today? Find out this, and when they are predicted to overtake their male counterparts in numbers, on **page 6**. My article highlights the achievements of the first female medical students and the contributions of women doctors past and present. It also considers what the rise of women in medicine means for the future of the profession.

Continuing the tradition of inspirational women in medicine is Dr Kate Granger. Diagnosed with terminal cancer three years ago, she launched the now hugely successful #hellomynameis campaign encouraging doctors to introduce themselves to patients. She tells us about her work on page 12. Core procedures are a

HOTO: RON CATHF

challenge for all F1 doctors and on page 4 foundation doctor Anli

Zhou offers tips on arterial blood gases, blood cultures and intravenous infusions. Prescribing raises a number of risks for new doctors and on page 10 MDDUS medical adviser Dr Naeem Nazem offers advice on getting it right.

Mistakes, or at least the happy accidents of serendipity, have played a huge part in shaping medicine as we know it. Allan Gaw explores the value of sometimes getting it wrong on page 5. Our case study on page 14 looks at mistakes made in the care of a 95-year-old man suffering palpitations.

And it's more than just childbirth that makes up the exciting field of obstetrics and gynaecology. We look at what it's like to work in this cutting edge specialty in our careers article on page 8.

 Dr Anne Parfitt-Rogers Editor

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END OF SEVEN-DAY NIGHT SHIFTS FOR JUNIORS

JUNIOR doctors will no longer be expected to work seven night shifts in a row from February, the Scottish Government has announced.

The move follows a sustained campaign by the family of Dr Lauren Connelly who was killed in a road accident in 2011 after working long hours.

Currently, the European Working Time Directive limits the average working week for doctors to 48 hours. However this can be averaged out over a month, meaning some still work more than 48 hours in a single week.

Health Secretary Alex Neil said this practice was "not in the spirit of the

law" and called for seven-day night shifts to be phased out. Figures show that one per cent of rotas in Scotland schedule trainees to work seven full night shifts in a row.

In addition, the way junior doctors' working hours are monitored will be simplified and, by 2016, the government wants no junior doctor to work more than seven day shifts in a row. Staff should also be given access to appropriate rest facilities.

Mr Neil said: "I am quite clear that no junior doctors in Scotland should have to work seven nights in a row and I am committed to ending this practice where, on occasion, it does exist by February next year.

"We expect boards to observe not simply the letter, but also the spirit of the law."

External assessments will be introduced to ensure health boards comply with the new rules.

At the time of Dr Lauren Connelly's death, her father Brian told the *Herald* newspaper that she had worked 10 days in a row after starting her job at Inverclyde Royal Hospital and had completed another 12-day run of more than 107 hours in the weeks before she died. He believes his daughter was suffering from accumulated fatigue at the time of her fatal crash.

The BMA's Scottish Junior Doctors Committee chairman Dr David Reid said the move was "welcome progress" but added: "Many junior doctors still work a combination of both day and night shifts which means they can be working up to 90 hours a week. It will be a challenge... to achieve the target to end long stretches of day shifts."

ALL TRAINEES FOUND JOBS

ALL trainee doctors waiting to find jobs have been allocated a post, the UKFPO has confirmed.

The remaining 118 reserve list applicants for the 2014 foundation programme starting in August secured a place in the second round of allocations on June 26, a month earlier than expected.

It was confirmed in October that the foundation programme was oversubscribed for the fourth year in a row, with 235 juniors on the reserve list.

UKFPO National Director Professor Derek Gallen said he was "delighted" at the early allocations that meant all applicants would be ready to start their programmes in August.

SURGEON BROADCASTS CANCER OP USING GOOGLE GLASS



A SURGEON at The Royal London Hospital has become the first in the UK to broadcast online a live surgical procedure using Google Glass eyewear.

More than 13,000 medical students in 115 countries watched colorectal surgeon Shafi Ahmed (pictured left) remove cancerous tissue from the liver and bowel of a 78-year-old male patient. They typed questions online which appeared in the left-hand side of the Google Glass. Mr

Ahmed, colorectal cancer lead at Barts Health NHS Trust, then responded verbally, transmitted via the online feed.

In an online questionnaire after the procedure, 90 per cent of students who watched the broadcast said they wanted this type of learning to be part of the curriculum.

LEGAL DUTY TO CONSULT OVER DNR

DOCTORS now have a legal duty to consult with patients before placing a do not resuscitate (DNR) order in medical records.

The Court of Appeal in England made the ruling in a landmark case involving Janet Tracey, a 63-year-old care home manager who died soon after fracturing her neck in a car accident. She had also recently been diagnosed and under treatment for lung cancer.

The court found that doctors at Addenbrooke's Hospital in Cambridge had acted unlawfully in placing a DNR order without consulting her and her family. Lord Dyson ruled in his judgment that the hospital trust had violated Mrs Tracey's right to respect for her private life under Article 8 of the European Convention of Human Rights.

He said: "Since a [DNR] decision is one which will potentially deprive the patient of life-saving treatment, there should be a presumption in favour of patient involvement.

"There need to be convincing reasons not to involve the patient." Doctors are already advised to inform patients and their families in most cases before a DNR is applied. The ruling makes this now a legal requirement.

HIGH GP TRAINEE VACANCIES IN SOME PARTS OF UK

THE proportion of unfilled GP training places in certain parts of the UK is at its "worst ever", with up to a third of positions still vacant.

The worst affected area is the East Midlands where only 62 per cent of posts for the August 2014 intake had been filled by the end of May. Figures from Health Education England (HEE) show the Northern region and Merseyside have also had difficulties, with fill rates of 71 per cent and 72 per cent respectively. In contrast, London has filled 99 per cent of its posts.

In England, 2,630 positions have been filled – 89 per cent of the total available. This compares to a fill rate of 99 per cent for each of the past three years. Northern Ireland fared better with 97 per cent of posts filled this year; 91 per cent were filled in Wales and 90 per cent in Scotland.

The BMA's GP Committee described the figures as the "worst ever". A spokeswoman for HEE said they were working to boost applications, including reviewing the GP recruitment process, developing a pre-GP year for prospective applicants and offering trainees careers advice.

HIGH SATISFACTION AMONG TRAINEES

TRAINEE doctors are largely satisfied with the support and education they receive, according to an annual GMC survey.

Satisfaction is particularly high in general practice and anaesthetics, but some trainees highlighted problems at a local level that have not improved in the past three years.

A total of 53,077 doctors in training responded to the *National training survey 2014*, a response rate of 98.2 per cent.

Overall satisfaction with training was 81.2 out of 100, a slight rise on last year's score of 80.8. This follows the pattern of rising satisfaction levels from 2006 to 2013.

The GMC report showed satisfaction increased the longer a doctor had been in training, beginning at 78.4 in foundation trainees and rising to 81.6 in core training/ST3 and 83.7 in those at ST4 and onwards.

Findings showed trainees were generally very satisfied with the quality of clinical supervision (scoring between 84 and 92) and with the level of experience they received (79-84). But handover continued to score lowest at 67-68 out of 100.

STUDENTS DISSECT

A VIRTUAL cadaver is being used by medical students at the University of Edinburgh to perform detailed dissections.

CT scans were used to create 3D life-sized male and female bodies, offering views from front to back, side to side and upside down. Students can not only remove body parts but they can also add or remove organs, veins, arteries, nerves or tissue.

The new Anatomage Table is one of the first in the UK and joins the life-sized 3D anatomical hologram already used by the medical school.





Dr Anli Zhou offers advice on tackling three more core procedures that all trainees must perform

1 DOCTORS must demonstrate

competence in 15 procedures in order to become eligible for full GMC registration. Here are some helpful tips on performing arterial blood gases (ABGs), blood cultures and intravenous (IV) infusions.

ABGs

04

Assessment

I remember my first attempt at an ABG as a foundation year 1 doctor. It was on a surgical ward on a patient who was short of breath. His radial pulse was strong and easily palpable. I was confident that I would be able to get this core procedure signed-off. Unfortunately, after two failed attempts, which were both witnessed by a surgical SHO, I decided that it was probably the appropriate time to escalate it to someone more senior. Unsurprisingly, the SHO obtained the sample on her first attempt. I was eventually able to get the ABG core procedure signed off on my busy respiratory rotation but the experience taught me that things may not always go to plan.

Main pointers for ABGs:

- The modified Allen's test can be done to ensure that there is adequate blood supply through the ulnar artery.
- ABGs are very painful so always make sure that it is indicated before attempting. ABGs are very good at highlighting CO₂ retention but in certain situations such as diabetic ketoacidosis, a venous gas may provide adequate information.
- Always note the amount of oxygen that the patient is on.
- Remember to expel the heparin beforehand.
- Apply pressure to the area afterwards for five minutes.

Blood cultures

Different trusts/health boards have different equipment and this was the case for blood cultures when I was an F1. The whole process was different to what I learned as a student and, for me, it was like learning a new skill again. Although the equipment and the protocol were different, the underlying concepts were still the same. An aseptic non-touch technique was used, a sterile field was still required and all sharps needed to be discarded appropriately.

Main pointers for blood cultures:

- Always take more than one set of blood cultures. If you fail the first time, at least you won't have to waste time to collect the equipment again.
- Always note whether the patient is on any antibiotics.
- Each trust/health board may have different equipment and different protocols but they all have the same underlying principles and purpose.
- Do not touch the skin once it has been cleaned to avoid contaminating the sterile field and the subsequent blood culture sample.

IV infusions

At medical school we did a lot of revision on IV fluids, especially on maintenance fluids for patients who are nil by mouth. However, as an F1, you come to realise that IV fluids can be used for a wide range of patients for a variety of reasons. Furthermore, IV infusions not only include fluids but also IV medications such as antibiotics. My IV infusion core procedure was actually signed off by a staff nurse working on the ward. As doctors, we mostly prescribe medication rather than administer it. To get this core procedure signed off, I had to shadow the nurse while she mixed her antibiotics into a 100ml bag of IV saline. I then talked through the procedure with her. Afterwards, she watched me mix the infusion and put the infusion up for the patient.

Main pointers for IV infusions:

 When prescribing IV fluids, always check the patient's urea and electrolytes, their fluid status, past medical history and indication to guide the type of fluid you prescribe and the rate.

- Input and output monitoring can be another useful guide for prescribing IV fluids.
- When administering IV infusions, always get the infusion counter-checked.
- Always double check the patient's name, date of birth and allergies before administering the infusion.
- When mixing IV infusions, always check the guidelines to ensure the medication is mixed with the correct fluid.

Main pointers for core procedures in general

Completing the 15 core procedures within F1 is not difficult but being organised and preparing beforehand will help. Core procedures are skills that you will use throughout your foundation programme and they are likely to come into use as you progress in your career.

Here are some pointers for core procedures in general:

- Always communicate with the patient (or simulated patient). Talking through the procedure as you proceed can help consolidate your knowledge as well as making sure that the patient understands the procedure.
- Sometimes it may not always be possible to do the procedure on a real patient during your rotations. You can always demonstrate your competency in that skill through shadowing or through a simulation session.
- The aim of core procedures is to learn, therefore don't be disheartened if things do not go to plan. Use it as a learning experience and try to obtain feedback in order to improve in the future.
- Use the feedback that you have received when you have been signed off to further improve on your skills.
- Try to make sure that you don't leave too many skills to the last rotation.

Dr Anli Zhou is an F2 in emergency medicine based in Bolton

SERENDIPIT' DOO-DAH

Allan Gaw considers the value of medical mistakes

ARK Twain said: "Good judgement comes from experience," but added, "experience comes from bad judgement". He knew the value of "mistakes" - indeed he refused to recognise them as such. "There are no mistakes in life," he said, "there are only lessons to be learned."

Mistakes, or at least the happy accidents of serendipity, have informed and shaped medicine just as they have had a hand in the development of most human endeavour. There are many examples where the consequences of our errors have led to medical breakthroughs, and by examining them we can learn an important lesson on the nature of discovery. Here are just three examples from very different areas of medicine.

Ambroise Paré was a French barber-surgeon who spent much of his career in military medicine. On the battlefield, it was standard practice in his day to cauterise a soldier's wounds with boiling oil. Gunshot wounds, a relatively recent problem on the 16th century battlefield, were believed to be poisonous and had to be treated, purged and sealed.

In 1536, while serving under Francis I at the Siege of Turin, he used this technique until he ran out of the necessary oil. In an attempt to cleanse and seal the soldiers' wounds, he mixed a cocktail of egg yolk, oil of roses and turpentine and applied this instead. The next day, he was surprised to discover that while the wounds of those soldiers treated in the conventional way were, as expected, swollen, red and painful, those who had received his makeshift therapy were in better condition (because of the turpentine's antiseptic properties).

Forced to reach for an alternative treatment because the standard one was simply unavailable meant Paré had opened a new chapter in wound care. He went on to publish this revolutionary treatment of gunshot wounds in his *Method of Treating Wounds* in 1545 and changed medical practice.

Alexander Fleming accidentally contaminated his petri dishes, perhaps by leaving them by an open window. The penicillium that found its way onto his plates might have come from mould spores from beer in the Fountains Abbey Ale House across the road from his lab in St. Mary's Hospital, London. At least, a hopeful plaque outside the pub in question claims Sir Alexander as "a loyal regular" and takes credit for its part in the discovery of penicillin in 1928. Whatever the source, this was a mistake that, when understood, led to the advent of the antibiotic era.

The treatment of diabetes also owes its origins to serendipity. The pancreas was only discovered to be involved in the control of blood glucose

by accident. The German physicians Joseph von Mering and Oscar Minkowski removed the pancreas from a healthy dog in 1889. Afterwards, they noticed that the urine of the unfortunate animal was attracting flies. This was because the dog had developed diabetes due to insulin deficiency and was passing large amounts of sugar in its urine. This discovery set the scene for Frederick Banting and his research team in Toronto to discover the pancreatic hormone insulin 32 years later and to revolutionise the treatment of diabetes.

Accidents and mistakes will always happen, at least when people are involved, but the thread that binds these three stories

together is one of observation. If, in the chaos of the frontline hospital, Paré had not taken the time to examine his patients and to recognise the results of his accidental experiment, he would likely have resorted to the use of boiling oil as soon as a fresh supply became available. Had Fleming simply discarded his contaminated plates without pausing to examine the halos of inhibited bacterial growth around the mould, and if he had not asked why such a thing had happened, we would not have had penicillin. And, if the flies buzzing around that puddle of dog urine had gone unnoticed and unquestioned by von Mering and Minkowski, the discovery of insulin and the subsequent transformation in the treatment of Type 1 diabetes would have taken much longer.

> Happy accidents can lead to discovery, but they are only fortunate if the insights they offer are noticed and acted upon by scientists. Every day in every lab and every clinic in the world, serendipity holds out its hand and offers us new knowledge. But we need the wit to realise it and those who do are special. The physiologist Albert Szent-Gyorgi, who won the 1937 Nobel Prize in Medicine or Physiology

for his work on Vitamin C and the citric acid cycle, realised this. He said: "Discovery consists in seeing what everyone else has seen and thinking what no one else has thought."

It is this simple attribute that separates the great scientists from the run of the mill - that allows paradigm-changing discoveries to be made based on the simplest of observations in those experiments designed for us by serendipity.

"Mistakes," said James Joyce, "are the portals to discovery." What door might we open today?

Allan Gaw is a writer and educator in Glasgow

"Every day in every lab and every clinic in the world, serendipity holds out its hand and offers us new knowledge"

WOMEN ON

Female doctors are expected to outnumber men within the next few years. What does this mean for the future of the profession?

EN were doctors and women were nurses. That's how the gender split in medicine seemed to present itself for many years. Access to the profession was generally restricted to university graduates and women were historically excluded from such studies. the 1900s after much strungle they were

Eventually in the 1900s, after much struggle, they were permitted entry but progress was slow. By the 1960s only 10 per cent of medical graduates were female.

Fast-forward to 2003 and this figure jumps to 61 per cent. It has since fallen slightly but currently sits at a healthy 55 per cent. The predictions are that by 2017 women doctors will outnumber men and the trend has led to some gloomy predictions from critics. But is the rise of women in medicine a bad thing?

Pioneers

A number of key figures in history have helped improve access and equality for women in medicine.

James Miranda Barry, thought to be the world's first lady doctor, is believed to have disguised herself as a man to gain admission to medical school. She graduated circa 1815 and became an accomplished army surgeon in Canada and South Africa. Only once did she allow herself to be examined, swearing the attending doctor to secrecy.

In 1869, The Edinburgh Seven became the first group of women medical students granted access to a UK university. But while they were allowed to attend classes, they lost their legal bid to be awarded degrees. One of these, the formidable Sophia Jex-Blake, went on to found two medical schools for women - the London School of Medicine for Women in 1874 and its Edinburgh counterpart in 1886. She also opened a women's hospital in Bruntsfield, Edinburgh.

Current statistics

Although male doctors still form the overall majority, women already dominate certain specialties. According to the Health and Social Care Information Centre, the number of UK female GPs in 2013 reached 20,435, compared with 19,801 male GPs.

Despite this, they continue to be under-represented in senior roles. In 2013, only 41 per cent of GP partners were female, suggesting women find it more difficult (or are less inclined) to reach the top jobs. However, this gender imbalance is small in relation to other professions, such as FTSE 100 company directors and senior judges, where women sometimes make up as little as 10 per cent of positions. Currently, women are well represented among the presidents of the Royal Colleges, with Professor Jane Dacre (Royal College of Physicians), Miss Clare Marx (Royal College of Surgeons), Dr Maureen Baker (chair of the Royal College of GPs), Professor Caroline McEwen (Royal College of Ophthalmologists), Professor Parveen Kumar (Royal Society of Medicine) and Dr Hilary Cass (Royal College of Paediatrics and Child Health). Dr Suzy Lishman will become president of the Royal College of Pathologists in November 2014.

The criticism

Common criticisms of the so-called feminisation of medicine focus largely on workforce issues and the tendency for women to work part-time, retire earlier and take career breaks along the way. It is argued that this means more money will have to be spent training more doctors to make up for those working less than full time.

In 2004 Professor Dame Carol Black, then President of the Royal College of Physicians, controversially voiced her views. She compared the UK situation to that in Russia, where both medicine and teaching are dominated by women. She said the professions had lost authority and respect and had seen their influence dwindle, something she feared could happen to medicine in the UK.

She also said women often avoided demanding specialties such as surgery or orthopaedics, as well as those requiring evening and weekend work. "What worries me is who is going to be the professor of cardiology in the future?" she said. "Where are we going to find the leaders of British medicine in 20 years' time?"

In response, Dr Maureen Baker, then secretary of the RCGP, argued that the profession may need to adjust to more flexible working patterns since many women doctors wanted a family.

At the NHS Fife annual health review in 2012 the topic was aired again when staffing issues were blamed on the number of female employees, many of whom work part-time or had taken maternity leave. But Fife Patients' Association responded by saying: "This is poor human resources management; it just doesn't seem to connect with the staff".

Jackson Carlaw, the Scottish Conservative health spokesman, agreed: "Since time began, healthcare has always been made up of predominantly women, so this 'feminisation' line is hardly new. Neither is the likelihood of females having children or requiring to work part-time, so this sounds like a hugely dated – and desperate – excuse."

R

Ongoing debate

In a Commons debate in June, MP Anne McIntosh said the number of women in the NHS was a "burden", while fellow MP Anna Soubry described them as a "drain on resources".

This followed a similarly critical newspaper article in January by oncology surgeon Professor J Merion Thomas. He expressed his concerns about the low numbers of female doctors choosing more demanding specialties, as well as the impact on continuing professional development and patient continuity of the increasing number of part-time doctors.

He recommended that all female medical students read Lean In, a book written by US businesswoman Sheryl Sandberg, which encourages women to commit wholeheartedly to their profession.

The Academy of Medical Royal Colleges Council offered a robust defence against the professor's comments.

"Women already dominate certain specialties but they continue to be under-represented in senior roles."

They described his arguments as "profoundly mistaken and not evidence based" and refuted his claims that "gender imbalance is already having a negative effect on the NHS". They rejected the suggestion that women in hospital medicine tended to avoid the more demanding specialties because of a lack of commitment. Gender disparity in some specialties was not, they argued, due to "failings" of women but "wider issues relating to structures, culture and behaviours which need to be addressed by the profession as a whole".

The Academy added that the changing nature of the medical workforce should be seen as an opportunity rather than a threat and opportunities for flexible working were increasingly being sought by both male and female doctors.

Positive qualities

So, do male and female doctors have different strengths and weaknesses? It's often suggested that female doctors bring a softer touch to medicine, with better listening skills and greater empathy. A 2011 article on the US website Medscape (Women MDs spend more time with patients: does it matter?) highlighted research that found female doctors on average spend more time with their patients than their male colleagues. It also noted that women were much more likely to engage in "patient-centred" interviewing by "actively enlisting patient input, counselling, and exploring larger life-context issues that affect patients' conditions."

Some patients may also be more comfortable discussing their conditions and being examined by females - this can happen in specialties such as obstetrics and gynaecology, and may in some cases even be a religious requirement. That said, it would certainly be overly simplistic to say that all women practise medicine in a way that is distinct from (or indeed superior to) men.

Responding to a new era

The NHS is not an organisation that is known for adapting rapidly, but it's clear that the evolving workforce will necessitate

some changes. In 2009 the Department of Health published *Women doctors: making a difference – report of the Chair of the National Working Group on Medicine*. It made several recommendations for healthcare services including improving childcare availability, part-time opportunities, careers advice and mentoring, workforce planning and appointment of champions.

It has also been suggested that improving access to flexible working for men, including extending paternity cover entitlements, would be another important step towards a more even professional playing field.

Anne Parfitt Rogers is a foundation doctor and editor of FYi

Useful links

- The Medical Women's Foundation –
- www.medicalwomensfederation.org.uk/ Dispelling myths at the RCSEng's Women in Surgery site -
- tinyurl.com/o6kf3c2
- Women in Psychiatry tinyurl.com/q3fp355
- The NHS North West Women in Medicine run an annual conference in England tinyurl.com/obnlqlk
- For inspiration, look no further than the University College London Leaders in Medicine podcasts -
- tinyurl.com/om2rp3b
- And the adventurous Dr Quinn www.drquinnmd.com



What first attracted you to obstetrics and gynaecology? After a bad experience as a third year medical student during a placement in women's health, gynaecology was the one specialty I had decided that I did not wish to pursue! But I soon

Q&A Dr Matthew Prior, ST5 Obstetrics & Gynaecology Royal Preston Hospital and Chair of the RCOG Trainees' Committee

changed my mind after spending time at a rural hospital in Africa during an elective. I saw first-hand that obstetricians make a huge difference and save lives of mothers and babies, something which we take for granted in the UK.

What do you enjoy most about the job?

the job? It is a privilege to be a part of the birth of a new baby, probably the most special and unforgettable part of a mother's life. But in contrast to other specialties, O&G provides a huge variety of work, so you can never get bored. We get to practise both medicine and surgery. I have developed my skills in ultrasound scanning and no two gynaecology or antenatal clinics are the same. Each day is different, providing new challenges.

CHILDBIRTH and BEYOND

A career in obstetrics and gynaecology offers opportunities in both medicine and surgery

HEY say there's one born every minute – an old adage that manages to make the miracle of childbirth sound positively humdrum. However, the specialty of obstetrics and gynaecology (O&G), and the unexpected challenges it can bring, is anything but.

This wide-ranging field offers a stimulating and rewarding career for doctors. While much of the focus is on childbirth – providing support and ensuring safety in maternity care – O&G extends beyond this, treating women's health issues at all stages of their lives.

The past 30 years have seen the development of many new techniques. Improvements in ultrasound and body imaging, for example, have made care of the baby in the womb a central part of the specialty and have dramatically improved diagnostic accuracy. Three and four-dimensional imaging are among the most recent advances.

The discipline remains at the cutting edge of medicine and continues to evolve, with many research arms, both at clinical and molecular levels.

Entry and training

Core training in O&G starts after completion of F2 and lasts seven years, from ST1 to ST7. After two years of basic training (ST1-ST2), doctors must pass the first part of the exam for membership of the Royal College of Obstetricians and Gynaecologists (MRCOG), the body in charge of setting the content and structure of the training programme. The second part of the exam is taken three years later, after completion of intermediate training, at ST5. Two further years of advanced training follow (ST6-7), leading to the Certificate of Completion of Training (CCT).

During ST1-5, O&G trainees follow a core

curriculum which is made up of 19 modules including two basic ultrasound modules. Trainees work towards achieving the various competencies contained in each module.

During advanced training (ST6-7), doctors start to develop the specific skills needed for the areas in which they would like to practise as a consultant by choosing advanced training skills modules (ATSMs), or by applying for subspecialty training. Those interested in an academic career would complete the academic curriculum at the same time as the core curriculum.

Desirable personal qualities are varied and include: communication skills; problem solving and decision making; manual dexterity; empathy and sensitivity; and an ability to cope with pressure.

The RCOG website offers extensive information to would-be specialists, from training pathways and a career prospectus to FAQs and case studies. Recruitment is accessible centrally and online only at **www.obsjobs.rcog.org.uk**

The job

Most consultants work in both obstetrics and gynaecology. Many have a major special interest in a particular area, such as high-risk obstetrics, fertility care or minimal access surgery. Some also work in subspecialties such as maternofetal medicine; gynaecological oncology; urogynaecology and reproductive medicine.

Most trainees and an increasing number of consultants work on a shift system in this 24/7 specialty, often described as a mixture of medicine and hands-on surgery. Potential work locations include theatre, outpatients, labour wards, scanning or other specialist clinics, and community and outreach clinics.

The surgical work is varied and involves close co-operation with other specialties such as midwifery, neonatology and paediatrics, anaesthetics, oncology, urology and colorectal surgery.

There is no such thing as a "typical" day in O&G, but it will likely involve ward rounds, seeing inpatients, new admissions and arranging any required investigations. A major feature of the role is working as part of the multidisciplinary team on the labour ward, but it can also involve antenatal or gynaecological outpatient clinics. Trainees' duties are wide-ranging. They could be responsible for seeing emergencies in the labour ward, or work in gynaecology without other commitments during the day or night.

In obstetrics, doctors have a primary duty to both mother and baby as well as a responsibility to other members of the family (and, more widely, to society). Obstetric patients tend to be generally fit and healthy but some may suffer acute or chronic medical problems that complicate their pregnancy. Gynaecology covers a broader spectrum, dealing with all aspects of women's health in patients of all ages. Treatment may be for chronic, non-life threatening disorders or for acute emergency presentations indicating a gynaecological problem.

The unpredictable specialty of O&G offers great potential for trainees to work across a range of clinical areas as well as the appealing prospect of helping a new life safely into the world.

Joanne Curran is an associate editor of FYi

Sources:

 Royal College of Obstetricians and Gynaecologists - www.rcog.org.uk

Medical careers -

www.medicalcareers.nhs.uk

What do you find most

challenging? Obstetrics isn't exactly the most stress-free specialty. Whilst it is exciting to be providing care for women in labour, it is also a massive responsibility. When emergencies happen they tend to happen quickly and it is important to be able to make decisions but also to work closely with other members of the team.

Has anything surprised you about the specialty?

Jeing well informed before pplying for O&G training is mportant so that you are not urprised. Babies come at all imes of the day and night and o the hours and shift work can le demanding. This is not only he case as a trainee, but also ncreasingly for consultants.

what do you consider the most important attributes of a good O&G specialist? As with all doctors, the ability to show empathy and listen to your patients is the most important aspect of being a jood O&G specialist. O&G can tt times be very demanding ind unfortunately it is nevitable that bad outcomes vill sometimes happen. It is herefore important to be able o reflect on what has happened and have resilience o carry on. Thirdly, being able o balance risk and make lecisions under pressure is tey to being a good obstetriian and gynaecologist.

Is there any advice you could give to a final year or FY trainee considering O&G? Speak to lots of trainees and consultants, each person will give you more of an idea of what O&G is like. Reflect on what parts of medicine you like and dislike. If you like to have a lot of time to ponder questions and hate night shifts perhaps O&G is not for you. Take advantage of arranging taster days to further develop your experience, interest and insight into the specialty. Attend the RCOG careers fair in London on 15 November 2014 www.rcog.org.uk/events/ careers-day-junior-doctors MDDUS medical adviser Dr Naeem Nazem highlights some of the pitfalls in prescribing medication

RESCRIBING the right drug, in the right dose, to the right patient, is one of the most important responsibilities of any doctor. It is particularly relevant to hospital trainee doctors, who are often asked to prescribe unfamiliar drugs to unfamiliar patients. In this article we will look at some of the things you can do to reduce the risk of prescribing errors.

Write legibly

We are all familiar with the pressures of a busy ward, when you are faced with a backlog of patients to review or drug charts to re-write. It is easy in these circumstances to take shortcuts, but remember each patient has put their trust in you when taking a drug you have prescribed for them. Take extra care to write clearly and legibly, preferably in capital letters using the generic name of the drug. Don't forget that many people will need to read and understand your prescription, from the hospital pharmacist to the nurse on the drug round.

At MDDUS we have encountered several cases in which patients have received a different drug to the one intended by the doctor due to an illegible prescription. Some drugs which can look the same when handwritten include:

- carbamazepine vs carbimazole
- chlorpromazine vs chlorpropamide
- Losec[™] vs Lasix[™]

Many trainee doctors now work in hospitals that use electronic prescribing. However, the same cautions apply in this setting, particularly as the computer systems often use predictive text. The MDDUS is aware of one case in which a patient developed severe toxicity after being prescribed methotrexate instead of metoclopramide. Unfortunately the doctor had typed in "met" and selected the wrong option from the suggested drop-down menu.

Identify drug allergies

This is probably the simplest prescribing error to avoid. Always check that the allergy box is completed for every prescription chart and, if not, check with the patient. We have encountered numerous cases in which patients have made complaints or sought compensation following an adverse reaction to a known drug allergy. You are likely to face some difficult questions from your trust/health board if you prescribe an inappropriate drug without checking with the patient or the known allergy box on their drug chart.

Check dosage

It is easy to notice the difference between 1g of sugar and 1kg of sugar, or 1ml of water and 1l of water. However, with drugs the volumes are much smaller and concentrations often vary, making it easier to make mistakes.

One source of dosing errors is between "mg" and "mcg". This often occurs at the time of re-writing a barely legible drug chart, or when instructions to prescribe a drug do not come with the units. The consequence is that the patient receives a dose of the drug which is incorrect by a factor of 1,000. Avoid the abbreviation "µg" which is often misread as "mg". You could also try adding a space between each letter to make it clearer, for example writing "m g" or "m c g" instead.

A similar mistake can be made with the use, or omission, of a decimal point. Drugs are often prescribed in much larger or smaller doses for patients depending on their age, weight, renal and liver function. I have heard of one case where a patient was given 10mg of warfarin instead of 1.0mg for three days before the error was detected.

Remember you are personally responsible for every prescription you write and ensuring it is suitable for the patient. If in doubt, ask a colleague or refer to the BNF.

Check frequency

Even when the correct drug has been prescribed, patients can come to harm if it is given at an inappropriate dose or frequency. We have encountered several cases in which a loading dose of digoxin was inadvertently continued as a maintenance dose. There have been similar cases with phenytoin.

Some drugs require particular care. Unfortunately there have been several public cases of methotrexate toxicity, in which patients have received the drug daily instead of every three days. Similar errors have also occurred with bisphosphonates being prescribed daily rather than weekly. Such errors are more likely to occur when drug charts are re-written or amended and therefore doctors should take extra care to not only check the name of each drug is correct, but also that it has been prescribed in the correct frequency.

Confirm route

Many patients in hospital require complex medical care, which may include the administration of drugs by different routes. It is important to include a route of administration for every drug you prescribe and ensure the dosage is appropriate for that route of administration.

The importance of ensuring the correct route of administration is perhaps best highlighted by the chemotherapy drug vincristine. There have been several cases in which this drug, which should be administered intravenously, has been incorrectly delivered intrathecally with fatal consequences. Although numerous safeguards have been developed to try and eliminate the risk of this error, it has continued to occur and highlights the importance of the doctor being extra vigilant.

Consider drug interactions

Many patients in hospital have complex co-morbidities

requiring numerous medications. It is worthwhile checking a patient's existing medicines before prescribing anything new. Consider whether the effects of one drug may be affected by the addition of another, or whether the combination may pose a greater risk of adverse effects to the patient. We have seen several cases of patients on warfarin reaching dangerous levels of anticoagulation due to the addition of an interacting antibiotic.

Don't be afraid to seek help

Remember you are not alone. In addition to the national and local formularies, you should take advantage of the knowledge and experience of those around you. The ward pharmacist will be able to provide valuable advice on dosing regimens and possible drug interactions. You should also ask senior colleagues to clarify any drugs they ask you to prescribe which are unfamiliar. Remember they were also trainees at one stage and no one expects you to know everything about every drug.

Dr Naeem Nazem is a medical adviser at MDDUS

hello my name is... CALL FOR COMPASSION

Her experience as a cancer patient inspired **Dr Kate Granger** to launch a campaign to improve the way doctors talk to their patients. She tells *FYi* about her quest for change

EING informed you have terminal cancer at the age of just 29 could rarely be viewed as a positive experience. But for Dr Kate Granger, now 32, it provided an opportunity to try to change the way doctors care for and communicate with their patients.

Struck by how few doctors took the time to introduce themselves to her during hospital treatment, last year Kate launched the #hellomynameis campaign which has gone on to become a huge success, with Twitter posts being shared nearly 48 million times across accounts worldwide.

Kate first began sharing her experiences in November 2012 when she set up a blog offering a startlingly honest perspective on "End of life care through the eyes of a doctor and a patient", writing letters addressed to "Dear Cancer..." and "Dear Chemo..." She has also published two books, *The Other Side* and *The Bright Side*, all while continuing her specialty training.

Not surprisingly, Kate's work has attracted considerable media interest and #hellomynameis has even been backed by the Health Secretary Jeremy Hunt MP who said doctors should remember that "every patient is a person".

The central focus of the campaign is simple: to remind, encourage and inspire staff to introduce themselves to every patient they meet. But, Kate emphasises, it runs much deeper. "It is about providing truly person-centred care," she says. "It's about remembering the person behind the disease or condition."

No warning shot

It was during a holiday in California with her husband that Kate first began to feel unwell with tiredness and back pain.

"The doctors found very quickly that I had



acute kidney injury with a creatinine of 600," Kate explains. "A CT scan showed multiple soft tissue masses and extensive lymphadenopathy throughout my abdomen and pelvis. By this point I had worked out that I had cancer, well before the American doctors, I think."

Kate returned from the US with a provisional diagnosis of ovarian cancer. After an MRI, an FY brought devastating news. Kate remembers the moment vividly: "A junior doctor I had never met said that I had liver and bone metastases, when I was alone, with no warning shot. There was no checking my baseline understanding and he couldn't leave the room quick enough. I never saw him again and the nurses were unaware I'd just received my death sentence.

"I was left deeply distressed, knowing that I was going to die."

The diagnosis was later confirmed by her consultant oncologist but this time the discussion went very differently. "He sat on my bed, held my hand and broke the news gently that this was the worst case scenario and that I had a very aggressive form of sarcoma called a desmoplastic small round cell tumour.



"He then sat in silence, which allowed me to release my emotions and cry. He was also extremely gentle in his communication of what the next steps entailed."

Kate had reservations about chemotherapy, but accepted it on the understanding that her consultant would support her if she decided to end her treatment.

The stark reality of this "death sentence" was a far cry from her life just six years before when she qualified with honours from Edinburgh University with ambitions to become a geriatrician.

Her unique perspective as a doctor-patient means Kate can interact fully with her doctors, helping her feel in control of her treatment. It also allowed her to negotiate a few days' leave from hospital to attend a friend's wedding in June, when doctors agreed she could administer her own meropenem.

But she concedes it is a double-edged sword. "I have the knowledge to interact with my healthcare team at the same level but that is not always a good thing, as you know what might be coming with a particular procedure or treatment."

Not just a disease

Kate hit upon the idea for the #hellomynameis campaign during a hospital stay when she noticed a lack of introductions from many members of the healthcare team. When staff did take the time to introduce themselves, she found it made a huge difference to how she felt as a patient.

It made her determined that doctors should "see me, not just my disease", and she has delivered talks to healthcare professionals across the country on the importance of communication skills and the other "little things" - holding a hand, taking time to listen - that make patients feel more reassured.

www.mddus.com



"I began to tweet about the campaign and it became clear that my experience was not unique," she says. "I wrote a blog and invited healthcare staff to pledge their support. We designed a logo to give the campaign a visual identity, and put together a website - www.hellomynameis.org.uk - where you can find free information and resources."

The hard work appears to be paying off with lots of Kate's 26,000 + Twitter followers

measuring what we do properly so we can see the effects of improvement work. Small changes can have a massive impact."

Ups and downs

Aggressive treatment has enabled Kate to keep working, something which is extremely important to her. "When I was first diagnosed I went through five cycles of intensive inpatient palliative chemotherapy," she says. "That was



"A junior doctor I had never met said that I had liver and bone metastases, when I was alone, with no warning shot"

offering their support, many buying branded #hellomynameis name badges sold in aid of the Yorkshire Cancer Centre Appeal.

A meaningful legacy

Despite her situation, Kate is determined her illness will not be "a negative entity". "Even though I am going to die prematurely," she says, "I want to leave real, positive and tangible legacies that improve care for many patients to come."

While poor communication is often the result of workplace pressures, Kate is encouraged that these skills are becoming an increasingly prominent part of medical training.

"Holding up a mirror to this suboptimal care is uncomfortable but essential for us to improve," she says. "Everyone needs to buy into quality improvement as an idea and we need to start extremely tough and I was in and out of hospital with complications. It did dramatically shrink my tumours, though, enough to eradicate my pain and prolong my life."

This treatment ended in January 2012 and an unexpectedly prolonged period of disease stability allowed her to return to work and live a relatively normal life.

But in September last year, she began to feel unwell again and discovered an enlarged lymph node in her left supraclavicular fossa. A CT scan showed progressive disease. "Deciding whether or not to have further chemotherapy was so difficult. I constantly cycled between thinking 'no leave me alone' and 'yes come on let's give this a bash'. After much soul searching, I chose to have more treatment."

Kate's disease has responded well but the



Clockwise from opposite page: Dr Kate Granger and husband Chris on a charity walk in Windermere; Kate and Chris attending the Yorkshire Cancer Centre charity ball in 2012; Kate graduating from medical school in 2005; and publicising the #hellomynameis Twitter campaign

tumours in her pelvis have not changed, leaving her with difficult-to-manage ongoing pain.

"Perhaps the most annoying long-term effect of cancer treatment has been subtle cognitive impairment," she says, "most noticeably reducing my ability to multi-task and slowing my thought processes. For this reason I don't do on call work anymore, perhaps one of the major bonuses of dying from cancer!"

Keep on sharing

Kate is equally busy when the working day ends. "I love to cook and entertain friends and family. I play the flute and enjoy swimming. I also have a 'bucket list' which has kept me busy over the past three years. My husband Chris and I have renewed our wedding vows, visited Paris, Barcelona, New York and California, I've had a tattoo and spent time recreating treasured childhood memories. I am also jumping out of a plane in August."

"I do have some dark days when I feel low and scared but there are so many good things in my life," she says. "Every day I see the #hellomynameis campaign spreading. Patients and carers are telling me what a difference it is making and that keeps me motivated to keep on sharing my story.

"I have precious little time left and if I am going to make this idea fly then I have to dedicate some of this time and energy while I am well."

Rowan Morrison is a writer based in Edinburgh

Links:

Kate's blog: drkategranger.wordpress.com Kate's Twitter feed: twitter.com/GrangerKate #hellomynameis campaign website: www.hellomynameis.org.uk

CONCERNED LOVED ONE

Day 1

Mr \overline{T} – a 95-year-old war veteran – attends A&E complaining of palpitations. He is accompanied by his son, David. The symptoms have been long-standing and periodic but less tolerated of late. He is otherwise reasonably fit considering his age. Normal rhythm is restored but the A&E doctor decides it is best to keep Mr T in overnight for observation. He also commences the patient on verapamil to prevent further palpitations.

Day 3

V

Mr T is transferred to a general ward having developed a chest infection. He is given antibiotics and over the next few days he develops appetite loss and symptoms of nausea and vomiting. An ST on the ward, Dr L, prescribes an antiemetic as well as low-dose diazepam to ease Mr T's anxiety.

Day 9

Mr T's son requests a meeting with Dr L. David is concerned to hear that his father has been prescribed an antidepressant in addition to his other medications. He has also been on the internet and read about the potential side-effects of verapamil and is of the opinion that this drug in combination with the antidepressant could be the cause of his father's nausea and increasing listlessness. Dr L says it is more likely due to the antibiotics course which is to finish the next day. The doctor explains that the antidepressant had been prescribed because Mr T's lethargy, sleeplessness and lack of appetite could be symptoms of low mood at having been confined to a hospital bed for the last two weeks. Dr L agrees to discontinue the antidepressant but to maintain the verapamil dose.

Day 13

David requests another meeting and demands that the diazepam prescription be reduced or stopped as his father is "like some zombie". He is also still concerned the side-effects of the verapamil are adding to his father's deterioration. Dr L points out that nausea and lethargy are not common side-effects of verapamil and also that Mr T is under the care of a consultant cardiologist who has advised keeping the patient on the medication. David then produces legal documentation of welfare power of attorney. Dr L seeks further advice and informs David that treatment decisions are his father's to make as long as he is deemed competent by clinical staff. Mr T has so far expressed no direct objections to the treatment at the hospital.

 \mathbf{V}

Day 17

Mr T is transferred to a geriatric rehabilitation unit at another hospital against the wishes of his son. Dr L explains to David that Mr T no longer has "active medical problems" and this will facilitate his discharge home. David leaves his father at the new hospital but not before expressing concern to the ST in charge that his father looks unwell. He wonders if he might have a recurrent bout of pneumonia. The doctor reassures him that he will keep an eye on the patient. Next morning the hospital phones to say Mr T has passed away.

WO months later David lodges a complaint against Dr L with the GMC. In the letter he

I alleges that his concerns over the use of verapamil and other medications used to treat his father were ignored and the build-up of verapamil n his system precipitated his later heart failure. He also believes it was clinically inappropriate to transfer his father to the geriatric unit given his serious condition. He believes the hospital disregarded his welfare power of attorney in regard to treatment decisions in the care of his father.

MDDUS assists Dr L in drawing up his written response to the allegations along with the support of the hospital. All relevant documentation is forwarded to the GMC and two months later the regulator responds with its judgement on the matter.

On the allegation of an inappropriate drug regimen the case examiners find that the use and dosage of verapamil was clinically indicated in Mr T's treatment given his frequent attacks of SVT and that any side-effects had been adequately monitored. They also note that Mr T had previously been treated with diazepam for anxiety and its further prescription in low dose was not inappropriate.

The examiners also find no fault in the decision to transfer Mr T to the geriatric rehabilitation unit - which in any case was not a decision for which Dr _ bore sole responsibility.

But the examiners do find fault with the manner in which the judgement over capacity was nandled. They cite relevant legislation which ndicates that when a clinician disagrees with the welfare power of attorney it would be most appropriate to refer the matter to the Mental Nelfare Commission. The examiners acknowledge that Dr L was only acting in what he believed was the patient's best interests and went to considerable lengths to obtain agreement over the proposed treatment. However, they state it is clear ne was unaware of the relevant legislation that applied in this situation.

Despite this one criticism the case examiners judge that this does not call into question Dr L's fitness to practise or merit any action on his registration. The doctor is directed to the relevant GMC guidance in *Good Medical Practice*:

"You must keep up to date with and adhere to the laws and codes of practice relevant to your work."

Key points

- Ensure that you accommodate patient wishes in requests that another person is involved in discussions regarding clinical decisions.
- Ensure clinical decisions are voluntary and not the product of undue pressure from relatives or carers.
- Be aware of and follow relevant legislation in questions of patient capacity.

OUT THERE

MENDING BROKEN HEARTS A new medical superglue which bonds in seconds under UV light could soon be used to patch heart defects on the operating table or stop bleeding on the battlefield. Developed by Harvard Medical School, it could eventually replace stitches and staples in heart, gut and blood vessel surgery.

...AND BROKEN BONES A pen filled with live cells mixed with seaweed extract can "draw" new bone tissue. The 3D printing BioPen, developed at Wollongong University in Australia, adds layers of tissue cells to damaged bones and combines with existing nerves and muscles. It lets surgeons design customised implants during surgery rather than waiting weeks to grow replacement tissue.

PAIN PREP Magnifying a body part can help dull pain in that area, according to a study at the University of Milano-Bicocca, Italy. One expert believes the technique works because a person's attention is drawn to the place where they are expecting pain, such as an injection point, allowing them to mentally prepare for it.

MIRACLE CURE A 150-year-old drink called Elixir of Long Life has been recreated by scientists after being dug up by archaeologists. The old potion was found with hundreds of others beneath a New York construction site and was believed to be capable of helping people cheat death. The recipe contains various herbs and copious amounts of alcohol.



Stumped? The answer is at the bottom of the page

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Pick: DVD - The Best of Men

Directed by Tim Whitby, starring Eddie Marsan, Rob Brydon, George Mackay, Niamh Cusack; 2013

DLYMPIC fever has long subsided and there's every chance you missed this gem of a BBC drama. t tells the story of the remarkable Dr Ludwig Guttmann (Marsan), a pioneer in the field of rehabilitation of spinal injury patients, who all put single-handedly created the Paralympic Games.

It's 1944 and Guttmann has arrived to take charge of Stoke Mandeville's new unit for patients with spinal injuries, many of whom are WW2 casualties. It is a dark and depressing place where patients spend most of their time immobile and heavily medicated, the victims of old fashioned medical thinking. It's not long before Guttmann is throwing open curtains and applying his forward-thinking techniques to revitalise his charges, much to the consternation of some in the old guard.

Marsan is superb as the great doctor, triumphing over what could

have been a mangled foreign accent, whose no-nonsense approach is balanced by deep compassion and caring. The result is a heart-warming and uplifting tale that shows the value of thinking outside the box of outdated practice to realise the potential beyond. It was Guttmann's campaign to introduce competitive sport as therapy that eventually grew into the Paralympic Games we have today.

Book Review:

The Shock of the Fall

The Borough Press: **£14.29** hardback; **£7.99** paperback, 2014

Review by Jim Killgore, publications editor, MDDUS

A FORMER mental health nurse, Nathan Filer, won the Costa Book of the Year for his debut novel – and well deserved it is. Narrated by 19-year-old Matt Homes, this haunting tale is a vivid account of developing schizophrenia but with a voice that is caustic, witty and heart-breaking in turn – at times not unlike Holden Caulfield from *Catcher in the Rye*. "I have an illness, a disease with the shape and sound of a snake. Whenever I learn something new, it learns it too ... My illness knows everything I know. This was a difficult thing to get my head around."

The story centres on the tragic death of the narrator's sweet and much loved older brother Simon, who has Down's syndrome. It devastates his family and Matt feels terrible guilt over his brother but for reasons not completely apparent until near the end of the novel. Over the course of the story he circles the truth while also offering a sharp perspective on a mental health system which he sometimes hates yet relies on.

One telling episode, among

others, is when Matt asks to look up a medical term about his brother and a student social worker panics "as if the Nursing Dictionary contains all the secrets that patients aren't allowed to know." An occupational therapist named Steve tosses the book to Matt who observes:

"The really funny thing is that Steve made that little clicking noise with his tongue, and winked at me, as if to show that he was on my side or something. Except you're not on my side, are you Steve? Because if you were on my side you just would have handed me the dictionary like a grown-up...

But that is what these people do - the Steves of this world - they all try and make

something out of nothing. And they all do it for themselves."

than Filer

Many such uncomfortable truths are exposed and with bitter humour. Highly recommended.

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