ART OF MEDICINE

Caring for the “crash-landers”

In renal medicine the term “crash-lander” is used to describe a patient who presents, without warning, with end stage renal failure and who needs to start lifelong renal replacement therapy promptly. Bemusement, shock, and fear are often all present on patients’ faces as they face the prospect of starting dialysis. There is no timely educational and psychological support that patients would normally receive from multiple clinic visits to help prepare them for the journey ahead. The resulting negative impact on the patient’s physical, mental, and social wellbeing is aptly encapsulated in the term crash-lander.

However, as I have reflected more on my clinical experience, I have realised that the term should not be exclusive to nephrology. All patients admitted acutely to hospital have crash-landed in some way: their usual daily life has been interrupted abruptly to a state of ill health and vulnerability. It can be easy to forget in the conveyor belt machinery of hospital medicine that your patient has crash-landed in front of you. Look behind the patient’s voluminous paperwork, blood tests, scans, and treatments and see that there is a person there, an individual who has aspirations in life, a family and friends, and stories to share. Realising this may help strengthen our sense of humanism, compassion, and empathy towards our patients during this difficult juncture in their lives. It certainly helps remind me, as Dr Peabody recognised back in 1927, that the “secret to the care of the patient is in caring for the patient.”

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PRACTICE UPDATES

Falls: primary prevention

Older people (those aged ≥65 years) should be asked about falls when they have routine assessments and reviews with health and social care practitioners and if they present at hospital, according to NICE’s updated quality standard. Those at risk of falling should be offered a multifactorial falls risk assessment and an individualised multifactorial intervention. The quality standard extends previous guidance from NICE about secondary prevention of falls in hospital and in the community.


The NHS and the Spring Budget

The Royal College of Physicians (RCP) has issued a consultation response to the government’s 2017 Spring Budget (due to be published on 8 March 2017). The RCP calls for additional resources and support for the NHS, social care, and public health initiatives. Explaining that funding has not kept up with rising demand, the RCP would like action to ensure that realistic targets for efficiency savings are set that will not adversely affect patient care. They also ask that funds for transformation should be protected so that “genuine and sustainable transformation” can occur in the NHS.

http://bit.ly/2kVY5sK

FAST FACT—FEV$_1$/FVC RATIO IN ASTHMA

- The 2016 BTS/SIGN guideline on asthma now recommends that the lower limit of normal (LLN) of the FEV$_1$/FVC ratio should be used to define obstruction
- Previously, a fixed ratio of <70% was used
- The LLN is now recommended because the FEV$_1$/FVC ratio changes with age, and use of a fixed ratio results in underdiagnosis of obstruction in children and overdiagnosis of obstruction in older people.

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STATE OF THE ART REVIEW

Obesity and pregnancy
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This is an edited version; the full version is on bmj.com

In Europe, WHO estimates that more than 50% of men and women are overweight or obese and 23% of women are obese. In South East Asia, 14% of the population are overweight and 3% are obese.10 The prevalence of obesity in women is double that of men in Africa and South East Asia.11

Obesity causes short term and long term problems for the mother, such as increasing her risk of gestational diabetes (GDM) and pre-eclampsia.7 Because obese women are more likely to have excessive gestational weight gain (GWG),3 this further increases the risk of developing the metabolic syndrome in later life. The offspring have an increased risk of obstetric morbidity and mortality,4 and a long term risk of childhood obesity and metabolic dysfunction.8

In this review we address why medical and lifestyle interventions during pregnancy have failed to improve perinatal outcomes in obese women.

Effects of maternal metabolism on fertility and reproduction
Obesity perturbs the hypothalamic-pituitary-ovarian axis and overweight women display shorter luteal phases and lower levels of follicle stimulating hormone, luteinizing hormone, and progesterone.15

Obesity is also associated with changes in ovarian granulosa cells and the follicular fluid surrounding the oocyte. Evidence suggests that both uterine and ovarian changes associated with obesity contribute to reproductive dysfunction.

A meta-analysis reported that women with a BMI ≥25 had a higher risk of miscarriage (odds ratio 1.67, 95% confidence interval 1.25 to 2.25).24

A systematic review and meta-analysis reported an increase in congenital anomalies in the offspring of obese compared with non-obese women.

Placental changes associated with maternal obesity
In early pregnancy the human placenta is responsive to the high concentrations of maternal insulin found in obese women. This results in altered gene expression in relation to mitochondrial steroid hormone production and energy metabolism. Furthermore, placental size in early pregnancy is strongly correlated with subsequent fetal adiposity at birth.33

Differences in maternal metabolism in obese and normal weight women
Insulin sensitivity decreases by 40-50% during the course of pregnancy but improves within days of delivery.49 50

Obese women show greater decreases in insulin sensitivity. In addition to affecting glucose metabolism, decreases in insulin sensitivity result in increases in various lipids and amino acids. Hence, uniform metabolic changes seem to occur during pregnancy, and differences between lean and obese women may relate more to the preconception metabolic condition of the mother rather than to any specific effect of pregnancy.

Effects of maternal obesity on maternal and neonatal outcomes during the pregnancy
Antenatal and intrapartum
Subclinical metabolic dysfunctions in obese women, such as GDM and pre-eclampsia, which are associated with adverse pregnancy outcomes, become clinically manifest later in gestation.51 62 These metabolic disorders have a higher prevalence in certain racial or ethnic groups, including African-Americans and southern Asians.53

Obese women have an increased risk of indicated preterm deliveries, but they also have an increased risk of spontaneous preterm births.64 In a systematic review and meta-analyses, the risk of perinatal mortality was related to increasing maternal BMI.

Obese women have an increased risk of a failed trial of labour, caesarean delivery, and endometritis; they also have double the risk of a composite measure of maternal morbidity and a fivefold increased risk of neonatal injury.66 The length of labour in nulliparous women is inversely proportional to maternal BMI.67 Obese women are also more likely to undergo a repeat caesarean delivery before active labour.69

WHAT YOU NEED TO KNOW

• Overweight and obese women have an increased risk of spontaneous miscarriage
• Obese women are at increased risk of pregnancy affected by congenital abnormalities
• Obese women have an increased risk of planned and spontaneous pre-term deliveries
• Guidelines recommend that obese women aim for a healthy weight before pregnancy
• Maternal obesity is associated with increased adiposity in the offspring at birth, during childhood and adolescence

0.5 HOURS
Maternal obesity increases the risk of anaesthetic complications. The Centre for Maternal and Child Enquiries and RCOG recommend that women with a pregravid BMI >40 should have an antenatal consultation with an obstetric anaesthetist. The risk of epidural failure is greater in obese women compared with normal weight and overweight women. Severely obese women have greater hypotension and prolonged fetal heart rate decelerations, after controlling for epidural bolus dosing and hypertensive disorders, compared with normal weight women. The combination of spinal anaesthesia and obesity greatly impairs respiratory function for up to two hours. General anaesthesia also poses a risk for obese pregnant women because of potential difficulties with endotracheal intubation and the increased prevalence of obstructive sleep apnoea.

Broad spectrum antimicrobial prophylaxis is recommended for all caesarean deliveries. There is an increased risk of surgical site infections after caesarean delivery in women who are overweight. Closure of subcutaneous tissue greater than 2 cm can significantly decrease the incidence of wound disruption.

Postnatal considerations
The RCOG recommends considering prophylactic low molecular weight heparin for seven days after delivery in obese women who have one or more additional risk factors, such as smoking, and considering low molecular weight heparin early in pregnancy until six weeks postpartum for those with two or more risk factors.

Breast feeding should be encouraged, not only because of the potential neonatal benefits, but because of potential maternal benefits relating to postpartum weight reduction and decreased risk of diabetes in obese women who developed GDM.

Postpartum depression affects one in seven women. When clinically significant depression is diagnosed, the obstetric care provider should start treatment or refer the patient as needed.

Neonatal implications
At term, infants of obese mothers are significantly heavier than those of normal weight women because of an increase in body fat, with pregravid maternal BMI and
placental size being the strongest correlates of infant weight in obese women. Figure 1 shows a proposed model of fetal overgrowth in obese women.

**Long term effects of maternal obesity on the mother and child**

Compared with normal weight women, childbearing in obese women increases postpartum weight retention, because a greater proportion of obese women than normal weight women have excessive GWG and excessive GWG is related to postpartum weight retention.96,97

Research into psychosocial aspects of behavior indicates that weight and healthy eating related self efficacy, or an individual’s perceived ability to undertake goal oriented behaviors despite potential barriers, was inversely associated with body weight in both early pregnancy and two years postpartum.104

Several RCTs have evaluated physical activity and dietary interventions to reduce GWG. Meta-analyses of these RCTs have reported conflicting evidence, with some studies finding significant beneficial effects of physical activity on reducing maternal GWG105 but others reporting minimal effects.106

In population based cohorts, greater GWG has been associated with greater offspring weight in childhood,108 as well as higher BMI and systolic blood pressure in early adulthood.109

Does obesity in pregnancy lead to obesity in offspring?

There is considerable evidence that maternal obesity during pregnancy increases adiposity at multiple life stages in the offspring—at birth29,113 and during childhood, adolescence,116,117 and adulthood.101

These data suggest that the effects of a short period of overnutrition during gestation can affect health throughout life.
Obesity is characterized by metabolic and endocrine derangements. Specific themes have been examined as mechanisms that potentially link maternal obesity to offspring adiposity and metabolic health. Broadly, these studies point to a model whereby dietary changes or exposure to one or more obesity associated metabolites or hormones during critical stages of development can alter developmental pathways in the offspring and lead to greater accrual of fat mass (fig 2).

Lifestyle interventions and perinatal morbidity
Recent RCTs suggest that behavioral lifestyle interventions do not prevent GDM or reduce the incidence of large for gestational age babies despite increasing physical activity and reducing maternal dietary glycaemic load, GWG, and maternal skinfold measures. At least five meta-analyses concluded that, although lifestyle interventions started during pregnancy had some success in reducing excessive GWG, they had little effect on adverse pregnancy outcomes including fetal overgrowth.

Data suggest that improvement in maternal metabolic function should begin before conception to improve perinatal outcomes.

In retrospective cohort studies, 10-20% of overweight or obese women lost weight between pregnancies. Inter-pregnancy weight loss in overweight and obese women was associated with a decreased risk of GDM or pre-eclampsia in a subsequent pregnancy. Supervised intensive lifestyle intervention in overweight and obese postpartum women is feasible, efficacious, and safe even in lactating women. The idea that lifestyle intervention before pregnancy is necessary to improve placental function and fetal development is gaining traction as a viable paradigm to improve perinatal metabolic outcomes.

Conclusions
The problems associated with obesity during pregnancy can be improved only with a comprehensive approach. Behavioral lifestyle interventions of improved nutrition and increased physical activity during pregnancy have helped modestly to reduce excessive GWG in overweight and obese women but have not decreased the risks of maternal metabolic dysfunction and fetal overgrowth. The perturbed metabolic environment of obese women exerts its effect on reproductive function before conception. The metabolic environment of obese women—whether inflammation, insulin resistance, lipotoxicity, or hyperinsulinemia—requires improvements to reduce the adverse obesogenic mediated effects on pregnancy. Importantly, improvement does not necessarily imply a return to the non-obese metabolic condition. Although ideally these measures should be initiated before a planned pregnancy, it is still worth limiting excessive GWG and trying to improve metabolic conditioning postpartum.

Competing interests: None declared.

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WHAT YOU NEED TO KNOW

- Consider measles in patients with fever, flu-like symptoms, and rash, and ask about immunisation and contact with unwell people
- When a case is suspected, contact local public health authorities and test for measles using immunoglobulin M serology and, if available, reverse transcription polymerase chain reaction
- Offer opportunistic immunisation for children older than 1 year and adults who are unvaccinated or have only received one dose of the measles, mumps, and rubella vaccine

EASILY MISSED?

Measles in older children and adults

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This is one of a series of occasional articles highlighting conditions that may be more common than many doctors realise or may be missed at first presentation. The series advisers are Anthony Harnden, professor of primary care, Department of Primary Care Health Sciences, University of Oxford, and Kevin Barracough, School of Social and Community Medicine, University of Bristol. To suggest a topic for this series, please email us at practice@bmj.com.

HOW PATIENTS WERE INVOLVED IN THE CREATION OF THIS ARTICLE

An adult who was in hospital with measles read an early draft of this article. The patient recommended that we emphasise to clinicians the need to take a full vaccination history in any patient presenting with fever and rash.

A 23 year old woman has fever, flu-like symptoms, diarrhoea, and a rash that has spread from her face to her body. She cannot recall being in contact with anyone unwell and has not recently travelled or taken any drugs. She reports missing vaccinations as a child because her parents were concerned about safety. On examination she has a maculopapular blanching rash on her face and chest. Measles is suspected and confirmed with serology that is positive for immunoglobulin M antibodies to the measles virus. Reverse transcription polymerase chain reaction on a throat swab detected measles virus RNA.

What is measles?

Measles is widely perceived as a disease of early childhood, despite almost two thirds of recent cases in the United Kingdom being in those aged 15 and older. Patients typically present with fever, cough, coryza, and conjunctivitis, followed two to four days later by a characteristic erythematous maculopapular rash that spreads downwards from the face (figs 1 and 2). Patients are infectious from four days before to four days after the onset of rash. Koplik’s spots—whitish lesions on the buccal mucosa—might be seen and are pathognomonic for measles (box).
Why is measles missed?

The reduction in incidence of measles since the introduction of routine vaccination means that clinicians are less likely to recognise clinical features. The features are non-specific and can be seen with other infections such as rubella, dengue, and parvovirus B19, as well as with drug reactions. For example, a study in London during a period of high measles transmission found that a suggestive prodrome and rash had a positive predictive value for measles of only 19% in primary care, increasing to 50% if Koplik’s spots were present.

How common is measles?

- More than 134,000 deaths from measles occurred globally in 2015, mostly in under 5s.
- In 2016, the Americas was the first region declared free of measles.
- Outbreaks continue to occur in other parts of the world because of poor vaccination coverage, with transmission largely among unvaccinated and incompletely vaccinated individuals.
- Between January and September 2016, 477 cases of measles were confirmed in England, with 65% (302/477) in those aged 15 and older. A proportionate increase in measles cases was seen in those aged more than 15: from 31.5% (640/2030 cases) in 2012 to 43% (39/91 cases) in 2015.

Why does it matter?

Death caused by measles is as high as 10% in some parts of the world. Since 1991 there have been 28 confirmed deaths from measles in the UK, 86% (24/28) in those aged 15 or more. Most patients recover completely with management of symptoms. Deaths occur from complications such as pneumonitis, encephalitis, superimposed bacterial infections, and, later, subacute sclerosing panencephalitis.

Measles is highly infectious and spreads by respiratory droplets when an infected person breathes, coughs, or sneezes. Presence in the same room as someone with measles for more than 15 minutes increases the chances of infection. Early detection and isolation of suspected cases can reduce this risk.

How is measles diagnosed?

Laboratory confirmation is essential to distinguish measles from other febrile illnesses with rash, and to ensure accurate notification of cases and appropriate public health actions. IgM antibodies can be detected in the serum within a few days of rash onset. At first contact with a patient suspected of having measles, obtain a blood sample for IgM enzyme immunoassay (positive predictive value of 98.2% and negative predictive value of 92.0%). In addition, where reverse transcription polymerase chain reaction testing is available, obtain a sample of oral fluid and urine, or a throat swab for isolation of measles virus (positive predictive value of 90.9% and negative predictive value of 99.4%).
How is measles managed?

Most patients can be managed at home with rest, adequate fluid intake, and control of fever with paracetamol. Offer admission to patients at a high risk of complications, such as pregnant women and those who are malnourished or immunocompromised.

Advise patients to avoid contact with pregnant women, infants, and those who are unvaccinated. Explain to the patient and carer to report features such as ear infection, breathlessness, uncontrolled or persistent fever, confusion, or convulsions. These may indicate complications such as otitis media, pneumonia, or encephalitis and require urgent admission and possible transfer to a high dependency medical unit.

To reduce nosocomial spread of infection, patients with suspected measles who are admitted to hospital must be nursed in a separate room and by healthcare workers with satisfactory evidence of protection against measles—either two documented doses of measles, mumps, and rubella vaccine or a known positive blood test result for the measles immunoglobulin G antibody.

In many countries, including the UK, measles is a notifiable disease. Suspected cases should be notified immediately to local public health authorities, who should undertake contact tracing and offer post-exposure prophylaxis as required. A Cochrane review found an absolute risk reduction of 629 fewer cases per 1000 exposed individuals when human normal immunoglobulin was administered as post-exposure prophylaxis, with a number needed to benefit of 2. This immunoglobulin may be offered to non-immune contacts who are pregnant, immunocompromised, or aged less than 1 year. It can be administered up to six days after exposure, but ideally it should be given within three days after exposure.

Exposure prophylaxis as required. A Cochrane review found an absolute risk reduction of 629 fewer cases per 1000 exposed individuals when human normal immunoglobulin was administered as post-exposure prophylaxis, with a number needed to benefit of 2. This immunoglobulin may be offered to non-immune contacts who are pregnant, immunocompromised, or aged less than 1 year. It can be administered up to six days after exposure, but ideally it should be given within three days after exposure. Offer immunisation to children aged 1 year or older and adults who are unvaccinated or have received one dose of the MMR vaccine only.

In many countries, including the UK, measles is a notifiable disease. Suspected cases should be notified immediately to local public health authorities, who should undertake contact tracing and offer post-exposure prophylaxis as required. A Cochrane review found an absolute risk reduction of 629 fewer cases per 1000 exposed individuals when human normal immunoglobulin was administered as post-exposure prophylaxis, with a number needed to benefit of 2. This immunoglobulin may be offered to non-immune contacts who are pregnant, immunocompromised, or aged less than 1 year. It can be administered up to six days after exposure, but ideally it should be given within three days after exposure.

A full vaccine course comprising two doses is thought to provide lifelong immunity. Overall uptake of the MMR vaccine in England is around 92.3%, but in London it falls short of 80%. Population immunity levels of more than 95% are required to prevent ongoing transmission. Offer immunisation to children aged 1 year or older and adults who are unvaccinated or have received one dose of the MMR vaccine only.

When I use a word... Medication reconciliation

The process of medication reconciliation has five steps: list the patient’s current medications; list the medications currently needed; compare the lists; make a new list based on the comparison; communicate the new list to the patient and caregivers.

Medication reconciliation seems to have been first described in 2003. It was born of the observation that medication errors often occur when a patient moves from one place to another, and therefore one strategy for reducing the risk of adverse reactions is “to reconcile the medication orders between the two transition points.” Medication reconciliation has been defined by the Institute for Healthcare Improvement (IHI) as “the process of identifying the most accurate list of a patient’s current medicines—including the name, dosage, frequency, and route—and comparing them to the current list, recognizing discrepancies, and documenting any changes, thus resulting in a complete list of medications, accurately communicated.” A better term might be “harmonization,” but the definition is well crafted, although it hasn’t yet made it into the Oxford English Dictionary.

The IHI has developed a “Universal Medication Form” to help patients maintain their own records. “Med rec,” as some call it, is one of the five elements in the World Health Organization’s “High 5s” project. NHS Education for Scotland has developed a medication reconciliation bundle for use in general practice, and all UK general practitioners can access a variation of this on the Royal College of General Practitioners’ website as part of a “Patient Safety Toolkit.”

Patients who have their own electronic medical records have the opportunity to maintain reconciled lists of their medications, enabling them to understand them better, and to link them to other information, such as test results. With so much online information becoming available, perhaps we should instead call the process medications linkage. But whatever we call it, the process is important and should be encouraged.

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CASE REVIEW
A swollen red finger

An 81 year old woman consulted her primary care doctor because she had a swollen, red, painful index finger (fig 1). The symptoms had been present for a few days. She had no fever and could not remember any injury. A few weeks earlier, she was prescribed flucloxacillin for a similar swelling and the swelling decreased but did not completely disappear. The patient had type 2 diabetes and hypertension for which she was taking glimepiride, fosinopril, chlorothiazide, amlodipine, and atorvastatin. On examination, there was red swelling of the distal phalanx and distal interphalangeal joint. The skin was intact without any wounds. Movement in the interphalangeal joint was limited. The patient was referred to a rheumatologist. The rheumatologist examined the patient, ordered blood tests, and performed diagnostic aspiration of the synovial fluid of the affected joint. The aspirate was examined microscopically (fig 2).

1 Based on the microscopic imaging and the history, what is the diagnosis?
2 What are the differential diagnoses of a swelling of the distal part of a finger?
3 What are the options for treatment?

Submitted by Wim Opstelten and Ruth Klaasen
Patient consent obtained.
Cite this as: BMJ 2017;356:j734

SPOT DIAGNOSIS
Sharp shoulder pain, getting worse, after a fall

A 62 year old man saw his general practitioner with worsening shoulder pain after a minor fall. The GP requested a radiograph. On the basis of the radiograph alone (fig 1), what imaging would you request next?

Submitted by Lauren Ramsay
Patient consent obtained.
Cite this as: BMJ 2017;356:j571

If you would like to write a Case Review for Endgames, please see our author guidelines at http://bit.ly/29HCBAL and submit online at http://bit.ly/29yyGSx
Orbital infarction with haematoma in sickle cell disease

A 5 year old boy with sickle cell disease presented with a two day history of painful right periorbital swelling. Initial treatment was with intravenous antibiotics for suspected orbital cellulitis. He was afebrile, however, with normal vision and ocular movements. Computed tomography (figure) showed right superolateral orbital collection, but no sinus disease. Leucocyte count and C reactive protein levels were normal. The eventual diagnosis was lateral orbital bone infarction, due to sickled erythrocytes, with secondary haematoma. This condition can be confused with other acute orbital pathologies such as orbital cellulitis. It is potentially sight threatening due to orbital compartment syndrome, and can be associated with intracranial haematoma. Although magnetic resonance is the optimal imaging modality for diagnosis of orbital infarction, it was not performed in this patient owing to his clinical condition. He recovered fully with intravenous fluids and systemic corticosteroids.

Matthew R Edmunds, (m.r.edmunds@bham.ac.uk), Academic Unit of Ophthalmology, University of Birmingham, Birmingham, UK; Lucilia Butler Parental consent obtained.
Cite this as: BMJ 2017;356:i6651

Gout treatment and premature mortality

Galen (c.129-216 CE) gave excellent descriptions of gout, which was common among his wealthy male clients. He delighted in advising them to abstain from sex and gluttony, leaving them with little to do. Now people tend to take allopurinol instead. Those who take this and other urate-lowering drugs show a higher level of premature mortality after adjustment for a range of other factors, according to a study of the THIN database of 10 million patients in UK general practice (Ann Rheum Dis doi:10.1136/annrheumdis-2016-210588). Moving to a rheumatology clinic in Spain, 237 new patients with gout had a cardiovascular assessment that classed over 40% as high risk, rising to 68% if carotid ultrasound was included in the risk calculation (Ann Rheum Dis doi:10.1136/annrheumdis-2016-210357).

Blurry about eye symptoms

Electronic medical records offer the prospect of putting in search terms and coming up with “big data” about patient symptoms. In the case of the eye, these include blurry vision, glare, pain or discomfort, and redness. But when a group of US investigators compared a search of electronic records with an eye symptom questionnaire in 162 patients, they found that at least a quarter of symptoms were missing from the electronic record (JAMA Ophthalmol doi:10.1001/jamaophthalmol.2016.5551). Big data may be big, but they are often incomplete.

Non-systolic heart failure worse in diabetes

About half of people with symptomatic heart failure have a normal left systolic ejection fraction. A secondary analysis of the IRBsartan in Heart Failure with Preserved Ejection Fraction trial examined the characteristics of the 27% of recruited patients who had diabetes (Circulation doi:10.1161/CIRCULATIONAHA.116.024593). Compared with other participants, those with diabetes had more signs of congestion, worse quality of life, and higher N-terminal pro b-type natriuretic peptide levels. Over a median of 4.1 years, cardiovascular death or heart failure hospitalisation occurred in 34% of patients with diabetes versus 22% of those without diabetes.

Why have bowel cancer screening?

SCREENSCO stands for Screening of Swedish Colon, something to bear in mind if you want to ask Swedish people why they did or did not accept a screening invitation. A study based on focus groups and telephone interviews (Eur J Public Health doi:10.1093/eurpub/ckw266) found high levels of misunderstanding about colorectal cancer and the screening programme, with a range of values and preferences that were often influenced by the people closest to them. Most of those asked did not see a role for health professionals in informing their decision.

Wasting the GP’s time

There is a strong moral flavour to a lot of discourse about when to see general practitioners in the UK, as shown by a study based on 52 video interviews (Soc Sci Med doi:10.1016/j.socscimed.2017.01.025). People worry about wasting the doctor’s time, perhaps encouraged by curmudgeonly television GPs stretching from Dr Cameron to Doc Martin. In fact, neither patients nor doctors are able to define what an inappropriate consultation might be, or how it might affect others.

Best case versus worst case

In a tertiary hospital in Madison, Wisconsin, surgeons underwent a two hour training session on how to use a communication framework based on best case and worst case scenarios (JAMA Surg doi:10.1001/jamasurg.2016.5674). They then used it for difficult decisions about surgical interventions with 32 patients aged between 68 and 95. Using a measure of shared decision making called OPTION 5, transcripts of consultations revealed a change in conversations before and after the training, towards greater sharing with patients and families and better awareness of other medical and social factors.

Lychee poisoning

The lychee, litchi, liechee, liche, li zhi or li zhi, or lichee, litchi or lichii, can be eaten safely by adults throughout the world, and yet the fruit can cause sporadic outbreaks of encephalopathy with high mortality in children in lychee growing areas. One of the most recent was in India in 2014 (Lancet Glob Health doi:10.1016/S2214-109X(17)30035-9). The culprit chemicals appear to be hypoglycin A or methylenecyclopropylglycine, which can cause brain damaging hypoglycaemia when lychees are eaten in quantity by undernourished children.

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