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the emphasis of our profession on 'disease'. This term for a particular condition has been replaced where appropriate by the term syndrome or disorder.

In this edition, each chapter covering clinical problems includes a section on those problems affecting children and the elderly. If problems affecting those age groups are not found in 'child and adolescent health' they will be found in the clinical chapters such as arthritis, dyspnoea and hypertension.

Such a book cannot possibly present all the medical problems likely to be encountered, but an attempt has been made to select those problems that are common, significant, preventable and treatable. I am confident that my general practice colleagues will identify with the book's content and methodology.

General Practice is written with the recent graduate, the international medical graduate and the medical student in mind. It is a comprehensive textbook that focuses on the very basics of medical principles and management. However, it is hoped that all practitioners will gain useful information from the book's content.

Making the most of your book

Improved design for better navigation allows you to find what you need more effectively.

▶ **Patient presentation** provides the overall structure of the book, mirroring clinical presentation in practice. *General Practice* is renowned for this unique and powerful learning feature which the book introduced from its first edition.

▶ **The staff of Asclepius icon** is a new feature highlighting diseases for when you are specifically searching for information on a particular disease.

According to WHO a certificate against yellow fever is the only certificate that should be required for international travel. The requirements of some countries are in excess of International Health Regulations. However, vaccination against yellow fever is strongly recommended to all travellers who intend to visit places other than the major cities in the countries where the disease occurs in humans.

Meningococcal infection

Meningitis due to this organism is a contagious lethal disease. It is common in Nepal, Mongolia, Vietnam and parts of Africa and Asia, especially in the dry season. Travellers trekking through the Kathmandu valley of Nepal and those attending the Haj pilgrimage to Saudi Arabia are at special risk and should have the vaccine. However, some countries require immunisation for entry.

Voluntary immunisation

Precautions against the following diseases are recommended for those travellers who may be at special risk.

Hepatitis A, B, E

Hepatitis A is a common problem in rural areas of developing countries. There is a declining level of antibodies to hepatitis A in developed countries and adults are at special risk so one or two doses of hepatitis A vaccine should be given. If there is insufficient time a single injection of human immunoglobulin (IG) can give protection for 3 to 6 months. It is safe for all age groups but children under 8 years should not need it. A blood test for hepatitis A antibodies can be carried out to determine a person's immunity.

Prevention of hepatitis A

The rules of avoiding contaminated food and water apply (as for traveller's diarrhoea). Hepatitis A vaccine is given as a course of two injections.

Hepatitis B is endemic in South-East Asia, South America and other developing countries. Vaccination is recommended, especially for people working in such countries, particularly those in the health care area or those who may expect to have sexual or drug contact. If patients have a 'negative' HBV core IgG titre, then vaccination would be worthwhile (three doses: 0, 1 and 6 months). Hepatitis E has a high mortality rate in pregnant women.

The usual approach for non-immunised people is to give the combined hepatitis A and B vaccine (Twinrix) as a course of three injections.

Typhoid

Typhoid immunisation is not required for entry into any country but is recommended for travel to third world countries where the standards of sanitation are low. It should be considered for travellers to smaller cities, and village and rural areas in Africa, Asia, Central and South America and Southern Europe.

The parenteral (subcutaneous) vaccine can be used but the new single dose typhi Vi vaccine or the oral vaccine, which have fewer side-effects, are generally preferred. The oral vaccine, which is given as a series of three or four capsules, appears to afford protection for about 5 years but is contraindicated in the immunocompromised.

Cholera

Cholera vaccination is not officially recommended by the WHO because it has only limited effectiveness. It is advisable for health care workers or others at risk entering an endemic area. Cholera is given in two injections 7 to 28 days apart or usually as an oral vaccine (Dukoral) over 1 week prior to exposure. It is not recommended in children under 5 years or pregnant women.

Japanese B encephalitis

This mosquito-borne flavivirus infection presents a real dilemma to the traveller and doctor because it is a very severe infection (mortality rate 20–40%) with high infectivity and high prevalence in endemic countries. The vaccine is prone to give allergic reactions and anaphylaxis. It may be obtained only in very restricted circumstances but can be obtained more readily abroad.

The disease is prevalent during the wet season in the region bound in the west by Nepal and Siberian Russia and in the east by Japan and Singapore, especially in Nepal, Burma, Korea, Vietnam, Thailand, China, eastern Russia and the lowlands of India. Rice paddies and pig farms are areas of risk. The usual preventive measures against mosquito bites are important.

DxT: febrile illness + vomiting + stupor = Japanese B encephalitis

Rabies

Rabies vaccination is recommended for some international aid workers or travellers going to rabies-prone areas for long periods. The vaccination can be effective after the bite of a rabid animal, so routine vaccination is not recommended for the traveller. Affected animals

▶ **Key facts and checkpoints** provide accurate statistics and local and global contexts.

Key facts and checkpoints

- Determination of the underlying cause of dyspnoea in a given patient is absolutely essential for effective management.
- The main causes of dyspnoea are lung disease, heart disease, obesity and functional hyperventilation.[1]
- The most common cause of dyspnoea encountered in family practice is airflow obstruction, which is the basic abnormality seen in chronic asthma and chronic obstructive pulmonary disease (COPD).[2]
- Wheezing, which is a continuous musical or whistling noise, is an indication of airflow obstruction.
- Some patients with asthma do not wheeze and some patients who wheeze do not have asthma.
- Other important pulmonary causes include restrictive disease, such as fibrosis, collapse and pleural effusion.
- Dyspnoea is not inevitable in lung cancer but occurs in about 60% of cases.[3]
- Normal respiratory rate is 12–16 breaths/minute.

▶ **Red and yellow flags** alert you to potential dangers. The severity rates red as the most urgent with yellow requiring very careful consideration.

Red flag pointers for headache

- Sudden onset
- Severe and debilitating pain
- Fever
- Vomiting
- Disturbed consciousness
- Worse with bending or coughing
- Maximum in morning
- Neurological symptoms/signs
- Young obese female: ? on medication
- 'New' in elderly, especially > 50 years

'Yellow flag' pointers[1]

This term has been introduced to identify psychosocial and occupational factors that may increase the risk of chronicity in people presenting with acute back pain. Consider psychological issues if:

- abnormal illness behaviour
- compensation issues
- unsatisfactory restoration of activities
- failure to return to work
- unsatisfactory response to treatment
- treatment refused
- atypical physical signs

▶ **Clinical framework** based on major steps of clinical features, investigations, diagnosis, management and treatment reflects the key activities in the daily tasks of general practitioners.

- hepatomegaly
- spinal tenderness
- splenomegaly (if severe)

Complications such as epididymo-orchitis, osteomyelitis and endocarditis can occur. Localised infections in sites such as bones, joints, lungs, CSF, testes and cardiac valves are possible but uncommon.

Symptoms of chronic brucellosis are virtually indistinguishable from the 'chronic fatigue syndrome' and can present with FUO.

DxT: malaise + headache + undulant fever = brucellosis

Diagnosis

- Blood cultures if febrile (positive in 50% during acute phase)[9]
- *Brucella* agglutination test (rising titre)—acute and convalescent (3–4 weeks) samples

Treatment[10]

- Adults: doxycycline 100 mg (o) bd for 6 weeks plus either rifampicin 600 mg (o) daily for 6 weeks *or* gentamicin 4–6 mg/kg/day IV daily for 2 weeks
- Children: cotrimoxazole + rifampicin
- Relapses do occur.

Prevention and control

Involves eradication of brucellosis in cattle, care handling infected animals and pasteurisation of milk. No vaccine is currently available for use in humans.

Q fever

Q fever is a zoonosis due to *Coxiella burnetti*. It is the most common abattoir-associated infection in Australia and can also occur in farmers and hunters. Rash is not a major feature but can occur if the infection persists without treatment.

Clinical features

- Incubation period 1–3 weeks
- Sudden onset fever, rigors and myalgia
- Dry cough (may be pneumonia in 20%)[10]
- Petechial rash (if persisting infection)
- ± Abdominal pain

Persistent infection may cause pneumonia or endocarditis so patients with valvular disease are at risk of endocarditis. It is a rare cause of hepatitis. The acute illness may resolve spontaneously. Untreated chronic infection is usually fatal.

DxT: fever + headache + prostration = Q fever

Diagnosis

- Serodiagnosis is by antibody levels in acute phase and 2–3 weeks later.

Treatment[10]

- Doxycycline 100 mg (o) bd for 14 days
- For endocarditis: prolonged course of doxycycline plus clindamycin or rifampicin
- Children: > 8 same antibiotics according to weight
  < 8 cotrimoxazole (instead of doxycycline)

Prevention

The disease can be prevented in abattoir workers by using Q fever vaccine.

Leptospirosis

Leptospirosis follows contamination of abraded or cut skin or mucous membranes with leptospira-infected urine of many animals including pigs, cattle, horses, rats and dogs. In Australia it is almost exclusively an occupational infection[9] of farmers and workers in the meat industry. There is a risk to dairy farmers splashed with urine during milking. Early diagnosis is important to prevent it passing into the immune phase.

Clinical features

- Incubation period 3–20 days (average 10)
- Fever, chills, myalgia
- Severe headache
- Macular rash
- Light-sensitive conjunctivitis (marked suffusion)

Some may develop the immune phase (after an asymptomatic period of 1–3 days) with aseptic meningitis or jaundice and nephritis (icterohaemorrhagic fever, Weil's syndrome) with a significant mortality.

DxT: abrupt fever + headache + conjunctivitis = leptospirosis

Diagnosis

- High or rising titre of antibodies: can be cultured

▶ **Seven masquerades checklist** is a unique feature of the book that reminds you of potential and hidden dangers underlying patient presentations.

Table 60.1 Vomiting: diagnostic strategy model *(continued)*

Q.	**Seven masquerades checklist**	
A.	Depression	possible
	Diabetes	✓ ketoacidosis
	Drugs	✓✓
	Anaemia	–
	Thyroid and other endocrine disorders	✓
	Spinal dysfunction	–
	UTI	✓✓
Q.	**Is this patient trying to tell me something?**	
A.	Possible: extreme stress (e.g. panic attacks) Consider bulimia (self-induced vomiting) Functional (psychogenic)	

▶ **Evidence-based research** is recognised with a full chapter on research in general practice and evidence base, including more on qualitative models. In addition, substantial references are provided for every chapter.

15

Research and evidence-based medicine

Not the possession of truth, but the effort of struggling to attain it brings joy to the researcher.

Goffhold Lassing (1729–81)

Effective research is the trademark of the medical profession. When confronted with the great responsibility of understanding and treating human beings we need as much scientific evidence as possible to render our decision making valid, credible and justifiable.

Research can be defined as 'a systematic method in which the truth of evidence is based on observing and testing the soundness of conclusions according to consistent rules'[1] or, to put it more simply, 'research is organised curiosity',[2] the end point being new and improved knowledge.

In the medical context the term 'research' tends to conjecture bench-type laboratory research. However, the discipline of general practice provides a fertile research area in which to evaluate the morbidity patterns and the nature of common problems in addition to the processes specific to primary health care.

There has been an excellent tradition of research conducted by GPs. Tim Murrell in his paper 'Nineteenth century masters of general practice'[3] describes the contributions of Edward Jenner, Caleb Parry, John Snow, Robert Koch and James MacKenzie, and notes that 'among the characteristics they shared was their capacity to observe and record natural phenomena, breaking new frontiers of discovery in medicine using an ecological paradigm'.

This tradition was carried into the 20th century by GPs such as William Pickles, the first president of the Royal College of General Practitioners, Keith Hodgkin and John Fry, all of whom meticulously recorded data that helped to establish patterns for the nature of primary health care. In Australia the challenge was taken up by such people as Clifford Jungfer, Alan Chancellor, Charles Bridges-Webb, Kevin Cullen and Trevor Beard in the 1960s,[4] and now the research activities of the new generation of GPs, academic-based or practice-based, have been taken to a higher level with the development of evidence-based medicine (EBM).

Based on the work of the Cochrane Collaboration and the initiatives of Chris Silagy in particular it has developed in the context of Australian general practice and now beyond that. The focus of EBM has been to improve health care and health economics. Its development has gone hand in hand with improved information technology. EBM is inextricably linked to research.

The aim of this chapter is to present a brief overview of research and EBM and, in particular, to encourage GPs, either singly or collectively, to undertake research—simple or sophisticated—and also to publish their work. The benefits of such are well outlined in John Howie's classic text *Research in General Practice*.[5]

Why do research?

The basic objective of research is to acquire new knowledge and justification for decision making in medical practice. Research provides a basis for the acquisition of many skills, particularly those of critical thinking and scientific methodology. The discipline of general practice is special to us with its core content of continuing, comprehensive, community-based primary care, family care, domiciliary care, whole person care and preventive care. To achieve credibility and parity with our specialist colleagues we need to research this area with appropriate methodology and to define the discipline clearly. There is no area of medicine that involves such a diverse range and quantity of decisions each day as general practice, and therefore patient management needs as much evidence-based rigour as possible.

Our own patch, be it an isolated rural practice or an industrial suburban practice, has its own

▶ **Extensive coverage of paediatric and geriatric care, pregnancy, and complementary therapies** is integrated throughout; as well as devoted chapter content providing more comprehensive information in these areas.

— arthrogram of shoulder (beware of false negatives)
— CT scan (limited use)
— MRI—a useful imaging method but not routinely required except for the unstable joint
— arthroscopy

Shoulder tip pain

Pain at the shoulder tip may be caused by local musculoskeletal trauma or inflammation or can be referred. Referred causes include:

- peptic ulceration
- diaphragmatic irritation
- ruptured viscus (e.g. perforated ulcer)
- intraperitoneal bleeding (e.g. ruptured spleen)
- pneumothorax
- myocardial infarction

Shoulder pain in children

Shoulder pain in children is not a common presenting problem but the following require consideration:

- septic arthritis/osteomyelitis
- swimmer's shoulder

Swimmer's shoulder

Although it occurs in adults, shoulder pain is the most common complaint in swimmers in the teenage years (over 12 years of age). American studies of college and national competition swimmers showed 40–60% had suffered significant pain.[9]

The problem, which is considered to be associated with abnormal scapular positioning and cervicothoracic dysfunction, occurs in the supraspinatus tendon where an avascular zone is compressed by the greater tuberosity when the arm is adducted and relieved when abducted. Swimmers' shoulders are forced through thousands of revolutions each day, so the susceptible area tends to impinge on the coracoacromial arch, leading to the impingement syndrome, which can progress with continued stress and age.[10]

Symptoms

- Stage 1: pain only after activity
- Stage 2: pain at beginning only, then after activity
- Stage 3: pain during and after activity, affects performance

Management

- Early recognition is important.
- Discuss training program with coach.
- Consider alteration of technique.
- Application of ICE after each swim.
- Use NSAIDs.
- Avoid corticosteroid injections.
- Refer for physiotherapy for scapular stabilisation and cervicothoracic mobilisation.

Shoulder pain in the elderly

As a rule most of the shoulder problems increase with age. Special features in the elderly are:

- polymyalgia rheumatica (increased incidence with age)
- supraspinatus tears and persistent 'tendonitis'
- other rotator cuff disorders
- stiff shoulder due to adhesive capsulitis
- osteoarthritis of AC and glenohumeral joints
- cervical dysfunction with referred pain
- the avascular humeral head

Since the rotator cuff is prone to degeneration with age there is a high incidence of rotator cuff tears in the elderly that are mostly asymptomatic.

The avascular humeral head

The humeral head may become avascular after major proximal humeral fractures. With experience, it is usually possible to predict the fractures at special risk. Early humeral head replacement with a prosthesis can lead to excellent pain relief and to a return of good function. Once the head has collapsed, there is secondary capsular contracture. Prosthetic replacement of the head is then rarely associated with an adequate return of joint movement. Thus, early referral of comminuted proximal humeral fractures for an expert opinion in all age groups is good practice. Early replacement can improve the functional outcome.[11]

Rotator cuff tendonopathy[12]

Rotator cuff tendonopathy also referred to as 'impingement syndrome', is the commonest cause of shoulder pain. It can be associated with inflammation (tendonitis), a tear in a tendon or impingement under the acromion. It may involve one tendon, usually the supraspinatus, or more of the rotator cuff tendons. It is most frequently encountered in young people engaged in sport involved in overhead activities and people over 50 years, in whom rotator cuff tears occur most often.

Supraspinatus tendonopathy can vary in intensity from mild to extremely severe. The severe cases usually involve calcification (calcific periarthritis) of the tendon and spread to the subacromial bursa (subacromial bursitis).

- Combinations of antidepressants have not been shown to be more effective than monotherapy and there is the risk of severe adverse effects, such as the serotonin syndrome.
- Consider referral if there is a failed (adequate) trial.
- Swapping from one antidepressant to another in those not responding is a proven beneficial strategy.
- Full recovery may take up to 6 weeks or longer (in those who respond).
- Continue treatment at maintenance levels for at least 6 to 9 months.[1] There is a high risk of relapse.
- For a second episode use antidepressants for 3 to 5 years.
- MAOIs are often the drugs of choice for neurotic depression or atypical depression.[1]

The serotonin syndrome[12]

This is a dangerous adverse reaction related to the use of the SSRIs and is most likely to occur with the combined use of MAOI drugs and other agents. The diagnosis is based on three criteria:

- Symptoms must coincide with the introduction or dose increase of a serotonergic agent.
- Other causes, such as infection, substance abuse or withdrawal, must be excluded.
- At least three of the symptoms or signs attributed to the syndrome must be present, i.e.
  — mental status/behaviour changes (e.g. agitation, confusion, hypomania, seizures)
  — altered muscle tone (e.g. tremor, shivering, myoclonus, hyper-reflexia)
  — autonomic instability (e.g. hypertension, tachycardia, fever, diarrhoea)

The offending agents should be withdrawn immediately and supportive therapy initiated.

Complementary therapy

St John's wort (*Hypericum perforatum*) has been found to be effective in mild-to-moderate depression[13] but a recent study showed that it was no better than placebo in treating moderately severe to major depression.[13] Considerable concern has been raised over the potential for St John's Wort to interact with prescription medication, including all antidepressants, warfarin, digoxin, anti-convulsants and the oral contraceptive pill.[14] Other herbal remedies, such as kava kava or valerian root, have not proved effective for the treatment of depression.

Electroconvulsive therapy

ECT is safe, effective and rapidly acting.[1, 6, 14]

Indications

- Psychotic depression (e.g. delusions, hallucinations)
- Melancholic depression unresponsive to antidepressants
- Substantial suicide risk
- Ineffective antidepressant medication
- Severe psychomotor depression
  — refusal to eat or drink
  — depressive stupor
  — severe personal neglect

Immediate referral for hospital admission is necessary in most of these circumstances. The usual course is about 9 treatments over 3 to 5 weeks. Antidepressants are usually discontinued during ECT but resumed (mood stabilisers can be an alternative) after ECT to prevent relapse.

Transcranial magnetic stimulation is an experimental procedure being explored as a less invasive alternative to ECT.

Recurrent depression

Lifelong antidepressant therapy may have to be considered. Lithium is an alternative medication for long-term use. New treatments are based on vagal nerve stimulation.

Recurrent brief depression

There is a high prevalence in general practice of patients presenting with recurrent episodes of depression of short duration, about 3 to 7 days, as often as monthly. PMT may be a factor. As a rule antidepressants are ineffective. Management is based on psychotherapy especially CBT.

Seasonal affective disorder

SAD or 'winter blues' is a recurrent disorder seen in people living in cold climates where the winters are bleak and dark. Features of depression include somnolence and increased appetite. Treatment is based on psychotherapy, phototherapy and medication (SSRIs). Refer <http://www.sada.org.uk>.

▶ **Summary** is a concise overview of the chapter, particularly useful for revision and examination purposes.

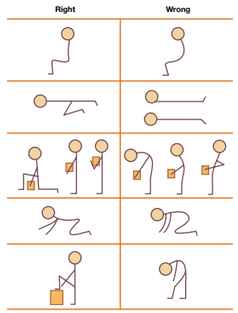

Figure 11.3 Patient education leaflet on backache (diagrammatic part only): rules of care for sitting, lying and bending

- testicular self-examination
- vaginal thrush
- menopause
- anxiety
- coping with stress
- depression
- bereavement

Summary

Recommended target areas for health promotion in general practice include:

- nutrition
- weight control
- substance abuse and control
  - — smoking
  - — alcohol
  - — other drugs
- exercise practices
- appropriate sleep, rest and recreation
- safe sexual practices
- promotion of self-esteem and personal growth
- stress management

Important health promotion recommendations are to encourage patients to:[13]

- cease smoking
- reduce alcohol intake to safe levels
  - — women no more than 2 standard drinks per day
  - — men no more than 4 standard drinks per day
  - — 3 alcohol-free days per week
- limit caffeine intake to 3 drinks per day
- increase regular physical activity
  - — 30 minutes per day for three days per week, sufficient to produce a sweat
- reduce fasting plasma cholesterol to 4.0 mmol/L or less
- have a diastolic BP of less than 85 mmHg
- have a BMI of between 20 and 25 (see p. 76)
- reduce fat, refined sugar and salt intake in all food
- increase dietary fibre to 30 g per day
- build up a circle of friends who offer emotional support
- express their feelings rather than suppress them
- discuss their problems regularly with some other person
- work continuously to improve their relationships with people
- not drive a car when angry, upset or after drinking
- have a 2-yearly Pap smear
- avoid casual sex
- practise safe sex
- have an HIV antibody check before entering a relationship

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Professor Geoff Bishop	basic antenatal care
Dr John Boxall	palpitations
Dr Jill Cargnello	hair disorders
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Dr David Dunn and Dr Hung The Nguyen	the health of Indigenous peoples
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Dr Lindsay Grayson	medical advice for travellers
Dr Michael Gribble	anaemia

Mr John Griffiths	pain in the hip and buttock
Professor Michael Grigg	pain in the leg
Dr Gary Grossbard	the painful knee
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Assoc Professor Peter Holmes	cough; dyspnoea; asthma; COPD
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Dr Ronnie Yuen	diabetes mellitus; thyroid and other endocrine disorders

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Chapter	Chapter title	Major updates—new or expanded coverage from the 3e
Part 1	**The basis of general practice**	
1	The nature and content of general practice	Symptoms and conditions related to litigation; chronic disease management
2	The family	
3	Consulting skills	
4	Communication skills	Use of analogy; 'road blocks' to good communication
5	Counselling skills	Problem gambling
6	Difficult, demanding and angry patients	
7	Palliative care	Gold Standards Framework (UK); opioid rotation
8	The elderly patient	Loneliness in the elderly; rules of '7' for the non-coping elderly patient; mental state examination tests; driving; later-life depression and suicide
9	Prevention in general practice	Updated immunisation; colorectal cancer and prostate cancer
10	Nutrition in health and illness	
11	Health promotion and patient education	Promotion of healthy lifestyle; introduction of the SNAP guide
12	Pain and its management	Coxibs; current use of paracetamol; somatoform disorders
13	Whole person approach to management	
14	Travel and tropical medicine	General updates throughout
15	Research and evidence-based medicine	More on qualitative approaches including phenomenology, ethnography, grounded theory
16	Laboratory investigations	
Part 2	**Diagnostic perspective in general practice**	
17	Inspection as a clinical skill	Adenoid facies; choleric facies; smoker's facies; uraemic facies
18	A safe diagnostic strategy	Acknowledgment of bullying in workplace and stress
19	Genetic conditions	Expanded terminology and definitions; inherited adult onset neurological disorders; hereditary haemoglobinopathies; haemolytic disorders, bleeding and clotting disorders
20	Depression	Postpartum depression; current information on antidepressants and pharmacological management; rule of '7'
21	Diabetes mellitus: diagnosis	**90% NEW coverage, now with two chapters on diabetes diagnosis and management**
22	Drug problems	
23	Anaemia	Anaemia and bone marrow; Vitamin B12 deficiency
24	Thyroid and other endocrine disorders	
25	Spinal dysfunction	
26	Urinary tract infection	Cranberry juice and UTI prevention; prostatitis; vulvovaginitis in children
27	Malignant disease	Common cancers and 5 year survival rate
28	HIV/AIDS—could it be HIV?	Pneumocystitis carimi
29	Baffling viral and protozoal infections	SARS and avian bird flu
30	Baffling bacterial infections	Antibiotic prophylaxis; Hansen's disease (leprosy)
31	Chronic kidney disease	Chronic kidney disease classification; ACR guidelines drug prescribing; goals of management
32	Connective tissue disorders and the vasculitides	Autoimmune diseases; connective tissue disorders and vasculitides; CREST syndrome; Sjögren's syndrome; Raynaud's phenomenon; Takayasu's arteritis; Bechet's syndrome
33	Neurological dilemmas	Motor neurone disease; Parkinson's; cognitive impairment with Parkinson's
Part 3	**Problem solving in general practice**	
34	Abdominal pain	Updating of abdominal pain
35	Arthritis	Features of viral arthritis; pharmacological management; new therapies in DMARDs; management of gout and pharmacological treatment of gout
36	Anorectal disorders	
37	Low back pain	Yellow flag pointers in low back pain
38	Thoracic back pain	Red flag pointers in thoracic back pain
39	Bruising and bleeding	Henoch schönlein purpura (HSP); acute thrombocytopema of childhood; splenectomy
40	Chest pain	Intra-coronary stents; hospital management; fibrinolytic therapy; oral anticoagulation
41	Constipation	
42	Cough	
43	Deafness and hearing loss	
44	Diarrhoea	Whipple disease; blastocystitis hominus
45	The disturbed patient	Somatisation; dysmorphophobia; conversion; dissociation; the acutely psychotic patient; cardiac dysfunction; body dysmorphic disorder
46	Dizziness	
47	Dyspepsia	
48	Dysphagia	Odynophagia
49	Dyspnoea	Pleural effusion; pulmonary fibrosis; acute respiratory distress syndrome (ARDS); severe acute respiratory syndrome (SARS)
50	The painful ear	Necrotising otitis externa
51	The red and tender eye	The painful red eye; key symptoms; features of episcleritis, scleritis and uveitis (iritis); corneal disorders; endophthalmitis
52	Pain in the face	Ludwig's angina; chronic sinusitis; temporal arteritis
53	Fever and chills	
54	Faints, fits and funny turns	
55	Haematemesis and melaena	Drugs associated with gastrointestinal haemorrhage
56	Headache	Post-lumbar puncture headache
57	Hoarseness	
58	Jaundice	Guidelines on jaundice
59	Nasal disorders	**ALL NEW**

Chapter	Chapter title	Major updates—new or expanded coverage from the 3e
60	Nausea and vomiting	Gastroparesis
61	Neck lumps	Thyroid nodule
62	Neck pain	Acute neck pain; evidence of benefit
63	Shoulder pain	Common shoulder conditions; rotator cuff tears; shoulder instability; osteoarthritis of the glenohumeral joint; glenoid labrum
64	Pain in the arm and hand	Intersection syndrome; ischaemic necrosis; ganglia; Raynaud's phenomenon
65	Hip and buttock pain	Avulsion body injuries; avascular necrosis; groin pain; fascia latia syndrome; ischial bursitis
66	Pain in the leg	
67	The painful knee	Anterior, lateral and medial knee pain; the Ottowa knee rules; complex regional pain syndrome 1; Baker's cyst
68	Pain in the foot and ankle	Fat pad disorder treatment
69	Walking difficulty	Flat feet, claw feet; hammer toes, claw toes
70	Palpitations	Atrial flutter; atrial fibrillation
71	Sleep disorders	
72	Sore mouth and tongue	Halitosis
73	Sore throat	Recurrent tonsilitis
74	Tiredness	
75	The unconscious patient	
76	Urinary disorders	Overactive bladder; uterovaginal prolapse
77	Visual failure	Referral; floaters and flashes
78	Weight gain	
79	Weight loss	
Part 4	**Child and adolescent health**	
80	An approach to the child	Guidelines for feeding infants; guidelines for toilet training; blocked nasocacrimal duct; growing pains; constipation; DSM IV criteria for enuresis; Mongolian blue spot
81	Specific problems of children	
82	Surgical problems in children	**ALL NEW**
83	Common childhood infectious diseases (including skin eruptions)	
84	Behaviour disorders in children	Habit cough; Asperger's disorder; childhood bullying
85	Child abuse	
86	Emergencies in children	Paediatric advanced life support; button and disc battery ingestion; grading system for croup; red flags bile
87	Adolescent health	Aged and informed consent; major depression
Part 5	**Women's health**	
88	Cervical cancer and Pap smears	New lesion classification; medico-legal issues; vaccination
89	Family planning	Delaying a period
90	Breast pain (mastalgia)	
91	Lumps in the breast	
92	Abnormal uterine bleeding	Uterine fybroids; carcinoma of the cervix; endometrial cancer
93	Lower abdominal and pelvic pain in women	Features of chronic pain; pelvic congestion syndrome
94	Premenstrual syndrome	
95	The menopause and osteoporosis	
96	Vaginal discharge	
97	Vulvar disorders	Vulvovaginitis in pre-pubertal girls; mild vulvovaginitis; moderate/persisent vulvovaginitis; labial adhesions; Bartholin's cyst
98	Violence against women	Management issues of sexual assault
99	Basic antenatal care	Hypotension; pruritis; obesity; breathlessness in pregnancy
100	Infections in pregnancy	**ALL NEW**
101	High-risk pregnancy	**90% NEW Maternal mortality; perinatal mortality; guidelines for specialist obstetric consultation; hypertensive disorders; medical conditions in pregnancy; multiple pregnancy; preterm labour; trauma; drugs**
102	Postnatal care	Tiredness; hair loss; back pain and coccygodynia
Part 6	**Men's health**	
103	Men's health: an overview	
104	Scrotal pain	
105	Inguinoscrotal lumps	Sperm granulomas; comparison of common testicular cancers; vasectomy
106	Disorders of the penis	
107	Disorders of the prostate	
Part 7	**Sex-related problems**	
108	The subfertile couple	
109	Sexual health	Oral medication; gender identity concerns
110	Sexually transmitted infections	
Part 8	**Problems of the skin**	
111	A diagnostic and management approach to skin problems	Erythema, miium, papilloma; zallus, exfoliation, keratoderma; topical corticosteroids for chronic dermatoses
112	Pruritis	
113	Common skin problems	Golfer's vasculitis; flea bites, bed bug bites; differences between chilblains and Raynaud's phenomenon
114	Acute skin eruptions	
115	Skin ulcers	
116	Common lumps and bumps	Stucco keratoses; sebaceous hyperplasia; lumps on ears; chondrodermatitis nodularis helicus; bursae
117	Pigmented skin lesions	The early nodular melanoma problem; pitfalls in diagnosis of melanoma; guidelines for excision margins