Once again the British Medical Bulletin has a wide range of reviews on subjects which are at early stages of development, or which may be unfamiliar to those outside the specialty. This edition is a bumper one to make up for some lack of reviews in recent editions.

We start with a fascinating review on ethics, then a methodological paper, two on health policy. There follow two reviews on the management of broad areas of the management of patients. Next comes a description of the management of four diseases, all difficult in their own ways. There follows a review on investigation and treatment that is modern radiology. There follows two reviews on aspects of bone and joint medicine.

The review on an ethical issue looks at prophylactic mastectomy: ethical issues (page 7) by Eisinger from the Department of Oncogenetics Prevention and Screening, in Marseille, France. She firstly asks why prophylactic mastectomy should be be seen more as an ethical concern than as a strictly medical question. She describes four main explanations.

First, a risky condition is not a disease and prevention does not improve well-being. The benefits are only statistical and make sense at the population level. Secondly, the cause of the risk is a genetic factor and some might argue about genetic ‘exceptionalism’. Thirdly, there is no organ as connected to femininity, sensuality, sexuality, adulthood and motherhood as the breast. Lastly, making tough and complex choices requires assistance from ethics.

She states that among ethical principles, western countries often rely on autonomy. The physician has to deliver all the relevant information; based on this ‘knowledge’ and using their own values, patients will take a decision. But in 1998 in France, national recommendations set a list of criteria to fulfil, reducing autonomy. In time it may be that this tough issue will be solved, thanks to the improvement of prevention and therapeutic efficacy, but in the mean time it remains a difficult decision.

The first of the methodological papers brings a new approach to an old problem. The paper Measuring socioeconomic position in health research (page 21) is written by Galobardes and Lynch from Bristol and Davey Smith now at McGill University in Canada.

In the review they describe different measures of socioeconomic position (SEP) and their uses in health-related research underlining the importance of socioeconomic circumstances in their influence on health. Poor socioeconomic circumstances generally lead to poor health and researchers have, for years, searched for mechanisms that could
explain the association. However there seems to be a greater variation in the association between SEP and health than is generally acknowledged when specific health outcomes are investigated.

Different indicators of SEP in health research can better capture the variations and are important when evaluating the full contribution of confounding by socioeconomic conditions. The authors suggest that using an array of SEP indicators within a life course framework offers opportunities to explore causal pathways in disease aetiology.

Next we have a review on health policy with the new model NHS: performance, perceptions and expectations (page 39) by Rudolf Klein from the London School of Economics.

His review analyses the transformation of the National Health Service (NHS) in England from a command-and-control to a mimic market model. He makes the point that even while introducing market incentives and encouraging private providers, the new model preserves the essential characteristics of the NHS as a universal, tax-funded service free at the point of delivery.

The spectacle of famine among plenty - service cutbacks at a time when the level of spending on the NHS is at a rate unprecedented in its history - raises doubts about the competence of both local managers and central policy makers. Payment by results gives providers an incentive to maximize activity so prompting questions about the future rationing of resources and the role of the medical profession therein. He emphasises the importance of researching the implementation and effects of the policies already introduced and their modification in the light of experience.

Another methodological review follows on The role of NICE technology appraisal in NHS rationing (page 51) by Walker, Palmer and Sculpher writing from York.

Their review examines the role of National Institute of Health and Clinical Excellence (NICE) technology appraisal in detail, focusing on the process itself and the methods used to establish cost-effective practices for the National Health Service (NHS). Identifying both effective and cost-effective practices has become central to rationing decisions in the NHS. The establishment of NICE, which produces guidance on what treatments should be provided by the NHS, represents the most visible approach to introducing economic considerations into these decisions. However the decisions over which activities will be displaced by NICE-approved treatments are made at a local level, while the cost-effectiveness threshold used to evaluate technologies is set nationally. This may result in treatments being displaced which are more cost-effective than those being introduced.

They suggest the introduction of programmes looking at disinvestment opportunities to help aid local decision makers is a key step in
Improving the allocation of NHS resources and removing geographical inequalities.

The first review of the general management of patients looks at *Cardiovascular disease prevention in primary care* (page 65), written by Chauhan, from the National Primary Care Research and Development Centre in Manchester.

The author makes the point that since the publication of the National Service Framework for coronary heart disease, there has been a move towards primary disease prevention with a greater focus on an individual’s absolute risk. However, meta-analyses and systematic reviews of the evidence for primary prevention are incomplete and the current guidelines and policy have led to considerable confusion in clinical practice. There is an increased use of risk assessment tools but no effective method of reviewing current activity with limited integration into the existing Quality Outcome Framework.

He also makes the point that there is inadequate evidence for some of the risk factors used to identify individuals at risk, the risk calculators used to quantify the degree of risk and the methods of communicating risk to patients. There is a need for a co-ordinated vascular disease prevention programme which can be applied at the individual and at the population level but which is also amenable to evaluation.

The second article on a wide area of health care is on *Mental health in low- and middle-income countries* (page 81) by Patel, from the London School of Hygiene and Tropical Medicine and Goa.

He makes the point that mental disorders in low- and middle-income countries (LAMIC) do not attract global health policy attention. He gives a review of research on mental disorders in adults in LAMIC since 2001 and recent analyses of disease burden in developing countries. Mental disorders account for 11% of the total burden of disease in LAMIC. Unipolar depressive disorder is the leading neuro-psychiatric cause of disease burden. Alcohol use disorders account for nearly 4% of the disease burden in LAMIC. Mental disorders are closely associated with other public health concerns such as maternal and child health and HIV/AIDS. Poverty, low education, social exclusion, gender disadvantage, conflict and disasters are the major social determinants of mental disorders.

Clinical trials demonstrate that locally available, affordable interventions in community and primary care settings are effective for the management of mental disorders. Mental health resources are very scarce and investment in mental health is less than 1% of the health budget in many countries. The majority of people with mental disorders do not receive evidence-based care, leading to chronicity, suffering and increased costs of care. Strengthening care and services for people with mental disorders is a priority; this will need additional investment in
human resources and piggy backing on existing public health programmes.

Next we have a review on early rheumatoid arthritis (page 97) by Scott at King’s College, London. He outlines the current knowledge of diagnosis, assessment, treatment and risk factors for early rheumatoid arthritis (RA) by a selective review of current literature.

He makes the point that three issues dominate the current views on early RA. First, its recognition may be difficult. Many experts consider that early inflammatory arthritis should only be classified as RA after several months’ of observation. Secondly, there is emphasis on early intensive treatment with conventional disease-modifying drugs or biologics, especially tumour necrosis factor inhibitors. Thirdly, there is a debate on risk factors with evidence of genetic risks and environmental factors like smoking that may trigger RA. Developing citrullinated proteins followed by anti-cyclic citrullinated peptide antibodies, specific for RA, appears to be a crucial pathogenetic step.

He concludes that early RA needs immediate specialist assessment and review. Early intensive therapy is effective but needs to be focused on patients mostly at risk of severe progressive disease.

Then follows a general review on eosinophilic leukaemia (page 115) by Fletcher and Bain from St Mary’s in London.

They make the point that the last few years have seen much progress in our understanding of, and treatments for, eosinophilic leukaemia. They review the differential diagnosis and sub-classification of eosinophilic leukaemia, and go on to discuss the management of these disorders. They state that it is increasingly possible to classify clonal eosinophilias based on the underlying molecular genetic abnormalities, and prognosticate and treat patients according to this.

The successful treatment of certain of these patients with imatinib, followed by a greater understanding of the mechanism of this treatment, has revolutionized the outlook for many patients with eosinophilic leukaemia. New similar tyrosine kinase inhibitors and other promising therapies are on the horizon.

Another review follows on current and potential therapeutic strategies for the treatment of ataxia-telangiectasia (page 129) by Lavin, Gueven, Bottle and Gatti from Brisbane, Australia and Los Angeles.

They state that ataxia-telangiectasia (A-T) is a rare autosomal recessive genetic disorder characterized by progressive neurodegeneration, a high risk of cancer and immunodeficiency. These patients are also hypersensitive to radiotherapy. The gene product defective in this syndrome, ATM (ataxia-telangiectasia mutated), normally recognizes DNA damage and signals the DNA repair machinery and the cell cycle checkpoints to minimize the risk of genetic damage. Treatment has focused on slowing the progress of the neurodegeneration; devising
approaches for the treatment of tumours while minimizing side effects and treatment with immunoglobulin for the immunodeficiency.

The most debilitating feature of this disorder is the progressive neurodegeneration due to loss of Purkinje cells in the cerebellum and malfunction of other neuronal cells. Correcting for the loss of Purkinje cells is technically very difficult and would require transplantation of embryonic stem cells. However, since it seems likely that oxidative stress may contribute to the neurodegeneration in A-T, potential therapies based on the use of antioxidants offer some hope. The authors describe the natural course of the disease, some supportive therapeutic approaches already in use and those with potential, based on our knowledge of the molecular and cellular characteristics of this disorder.

The next review is on diagnosis; diagnosing tuberculosis in HIV-infected patients: challenges and future prospects (page 149) by Mendelson, from the University of Cape Town in South Africa.

The author makes the point that the lack of an effective diagnostic test for smear-negative tuberculosis (TB) is a major contributor to the death of HIV patients in countries with high burden of HIV/Mycobacterium tuberculosis co-infection. The problem is that the prolonged incubation time of traditional culture techniques delays time to diagnosis and instigation of effective antituberculous therapy in those who are smear negative. In addition, the increased prevalence of extrapulmonary TB in HIV patients presents a particular diagnostic challenge in resource-poor settings.

The review highlights the challenges of diagnosing TB in patients with HIV and the recent advances in development of commonly used and novel diagnostic tests for TB.

Next we have a review on modern trends in interventional radiology (page 167) by Sabharwa, Fotiadis and Adam from Guys & St Thomas’ in London.

The authors review the current applications of Interventional Radiology (IR), outline newer technologies and techniques and emphasize the role of Interventional Radiologists as clinical practitioners. They define IR as a clinical modality that makes use of imaging guidance for the performance of minimally invasive treatment. The development of new imaging technologies and interventional devices has greatly increased the number of medical conditions that may now be treated by IR.

Promising new treatments in cancer therapy, the treatment of fibroids, venous access and spine interventions as well as advances in non-invasive vascular imaging, pharmacological therapies and peripheral arterial and venous interventions are providing exciting opportunities for IR, attracting significant patient interest and promising tremendous public benefit.
Next follows a review of a form of therapy: shock wave therapy for chronic plantar fasciopathy, (page 183) written by Rompe, Furia, Weil and Nicola Maffulli, one of our own Commissioning Editors.

The authors make the point that data from randomized-controlled studies on shock wave treatment for chronic plantar fasciopathy are statistically and clinically heterogeneous. They identified randomized trials from a current search of the relevant literature. They identified and retrieved a total of 17 articles. Significant heterogeneity between studies precluded pooled analyses. Instead, individual trial results were described in the text.

They concluded that current studies were heterogenous in terms of the duration of the disorder; type, frequency and total dose of shock wave therapy (SWT); period of time between SWT; type of management and control group; timing of follow-up and outcomes assessed, a pooled meta-analysis of SWT for chronic plantar fasciopathy was considered inappropriate. Nevertheless, there was a preponderance of well-designed studies showing favourable results. It appears that one should only consider SWT for plantar fasciopathy after more common, accepted and proven non-invasive treatments have failed.

There follows another review in the general orthopaedic line on creatine kinase monitoring in sport medicine (page 209) by Brancaccio, Maffulli and Limongelli at Keele and Naples, in Italy.

They show that total creatine kinase (CK) levels depend on age, gender, race, muscle mass, physical activity and climatic condition. High levels of serum CK in apparently healthy subjects may be correlated with physical training status, as they depend on sarcomeric damage: strenuous exercise that damages skeletal muscle cells results in increased total serum CK. The highest postexercise serum enzyme activities are found after prolonged exercise such as ultradistance marathon running or weight-bearing exercises and downhill running, which include eccentric muscular contractions.

For the future high CK serum levels in athletes following absolute rest and without any further predisposing factors should prompt a full diagnostic workup with special regards to signs of muscle weakness or other simple signs that, in both athletes and sedentary subjects, are not always promptly evident. These signs may indicate subclinical muscle disease, which training loads may evidence through the onset of profound fatigue. It is probably safe to counsel athletes with suspected myopathy to continue to undertake physical activity at a lower intensity, so as to prevent muscle damage from high intensity exercise and allow ample recovery to favour adequate recovery.

Norman Vetter
Editor-in-Chief