Medicine and Books

Expensive insect control

Integrated Mosquito Control Methodologies. Vol 2. "Biocontrol and other innovative components, and future directions." Ed M Laird, J W Miles. (Pp 464; figs; £65·50.) Academic Press. 1985. ISBN 0-12-434002-4.

The discovery of dicophane (DDT) and other residual insecticides in the 1940s revolutionised the control of flies, mosquitoes, and other vectors of many viral, bacterial, and parasitic diseases. The optimism of the early 1940s, however, was soon dampened by reports of the resistance of insects and other arthropods, firstly to DDT and then to other, more complex and expensive chemical compounds. The 1980 report of the World Health Organisation expert committee on vector biology and control listed 51 species of anopheles mosquitoes, 42 species of culicines, and 41 other arthropod species of medical and veterinary importance, being resistant to one or more chemical insecticides. Various techniques of dealing with this major problem have been and are being explored: alternative insecticidal compounds are being tested and their different applications evaluated and old and new environmental methods are being proposed to limit the breeding activity of the main vectors of disease. Certain biological procedures have received particular attention, and the term "integrated control methods" has been applied to the combination of non-chemical means and ecologically acceptable compounds.

This book consists of 20 papers by 31 scientists from 12 countries and has been edited by Marshall Laird of the Memorial University of Newfoundland and J W Miles of the Centers for Disease Control in Atlanta, both internationally known experts. It describes methods of insect control, ranging from natural predators (such as cannibalistic larvae of the genus *Toxorhynchites* or larvivorous fish, especially *Gambusia affinis*) to such unusual or experimental procedures as insect growth hormones or sterilising compounds, toxic plants, nematode worms, fungi, and bacteria. Much space is devoted to the use of *Bacillus thuringiensis*; a strain or subspecies of this bacterium (*B thuringiensis israelensis*, serotype H-14), discovered in Israel in the 1960s, proved to be highly virulent to many species of insects of economic importance and is now used for biological control. This aerobic spore producing bacterium forms crystalline exotoxin, which is highly active against mosquitoes and black flies; the toxic substance, harmless to man and animals, is now produced in commercial quantities and is widely used. Another bacterial species, *B sphaericus*, is undergoing field trials.

Seven chapters of the book deal with economic aspects of the use and marketing of "biorational" pesticides and large scale trials and the organisation of biological control methods in the Soviet Union, Israel, Czechoslovakia, Japan, New Zealand, Western Samoa, Fiji, and Tuvalu (formerly Ellis islands). Most of the authors believe that with the growing opposition to the use of chemical agents for pest control in some circles biological methods will gain greater acceptance.

In attempting to summarise the contents of this interesting and valuable volume, the reader has to turn to its introductory section, which assesses the early success of eradication of malaria and its later failures and disappointments. The editors emphasise that the technology of "biocontrol" has progressed during the past 20 years and its combination with chemical pesticides may be successful in some mosquito control programmes. Nevertheless, the long term impact of such projects requires the cooperation of community groups in the population concerned, though, as M W Service warns, the expectations of some enthusiasts may not be fulfilled, and there is little merit in devoting extensive resources to controlling a vector population with a natural enemy unless the project can become large scale and integrate with other measures. This endorses the view of a recent WHO expert committee that the effective use of biological control agents would be more difficult than the use of chemical insecticides until we know better the behaviour and bionomics of specific vectors.

The book is well edited and produced. For entomologists and other scientists interested in the subject it is a rich source of information and a mine of references up to and including 1983. The book's editors and authors deserve congratulations, but its price will prohibit purchase for many.

L J BRUCE-CHWATT

Balint and other techniques

First Steps in Psychotherapy. Teaching Psychotherapy to Medical Students and General Practitioners. Ed H H Wolff, W Knauss, W Bräutigam. (Pp 176; figs; DM 58 paperback.) Springer-Verlag. 1985. ISBN 3-540-150420.

A young doctor's hopefulness can all too easily be turned to inertia and disheartenment by a life spent with disease, suffering, and lack of direction. *First Steps in Psychotherapy* is about opening new avenues for optimism. Two kinds of training experience in psychotherapy are described in detail, one for medical students, the other for those already working as general practitioners.

The right blend of optimism and realism is a prerequisite for any successful psychotherapy, whether specialist or brief in general practice. During the '50s and '60s Michael Balint became widely known for conveying just such a sense of realistic optimism about the therapeutic potential of the doctor-patient relationship. He did this with a sound knowledge of physical and psychological medicine and a clear understanding of the practical restrictions in general practice. Balint groups, which were advanced mutual learning and supervision groups for general practitioners joined by psychoanalytical leaders, spread in various forms throughout the world. Such groups have continued despite Michael Balint's death in 1971, though the '70s and '80s have been a period of overall contraction and reappraisal.

It was also with a sense of optimism about what can be done within the doctor-patient relationship that Heinz Wolff and his colleagues at University College Hospital, London, began a scheme in 1958 to give medical students the opportunity voluntarily to treat patients with weekly analytical psychotherapy for a year or longer. In 1977 a similar scheme was started at the Psychosomatic Clinic of Heidelberg University. In both centres the emphasis was placed on group supervision conducted by experienced analytical psychotherapists.

Despite the translation of sections from the original German, the book gives an easily readable account of the collaboration between the University College Hospital and Heidelberg student psychotherapy projects. This is followed by a survey of the current state of Balint group training for general practitioners in Britain and in the Federal Republic of Germany. Irene Bloomfield describes her own experience as a member of a Balint group run by Michael Balint himself at University College Hospital, and medical students give their impressions of a first experience of psychotherapy and following a patient through treatment. Evident enthusiasm is

conveyed both by their descriptions and the many clinical vignettes used to illustrate the book throughout.

The most anxiety among experienced psychiatrists was aroused by the exposure of inexperienced medical students to patients undergoing psychotherapy and vice versa. This was met by the availability of close expert supervision in student groups and an evaluation of outcome for patients and students. There was little evidence of adverse effects, but the outcome study is probably the most disappointing part of the book because the samples are noticeably incomplete. Despite this weakness, however, the editors have successfully knitted together what might have been merely a loosely connected collection of impressions and anecdotes. The two strongest unifying themes are the value of comprehending the doctor-patient relationship and the creative potential of group supervision in psychological treatments. Doctors must learn to understand and use their patients' wishes and anxieties in relation to them if medical science is to advance on a personal as well as a technological front. This book gives an accessible account of a considerable contribution to that advance.

JOHN SHEMILT

Screening tried and tested

Screening for Cancer. Ed A B Miller. (Pp 480; figs; £65.) Academic Press. 1985. ISBN 0-12-496720-5.

Mortality from most cancers remains depressingly high, and apart from a possible reduction in the incidence of tumours caused by tobacco primary preventive measures are unlikely to have a major impact on the problem in the foreseeable future. The idea that deaths might be averted by the early detection and treatment of malignant disease is therefore attractive. This monograph provides an up to date review of the current approaches to screening for cancer and assesses their potential value.

The book is in three parts. The first section deals with the general theory of screening and the methods by which screening programmes can be evaluated. There is some overlap between the individual contributions, but I found that the repetition became tedious only in a chapter on multiphasic screening, much of which seemed out of place in a work devoted explicitly to the control of cancer. In contrast, I particularly enjoyed the chapter on the economic aspects of screening, in which the complex issues that confound cost benefit analyses are summarised concisely. Many of the parameters that enter such calculations cannot be measured reliably, but by mathematical modelling it may be possible to define a small subset of variables critical to the outcome of the analysis and so simplify the collection of data.

In the second part of the book tests that are or might be used as a basis for screening are reviewed. The review ranges from the organisation of laboratory services for cervical cytology to a detailed description of the technique of double contrast radiology of the stomach. Disappointingly, not all of the authors follow the general principles laid down in the preceding section—for example, the use of terms such as "diagnostic accuracy" and "observer accuracy" rather than sensitivity or specificity is confusing. Also, it would be useful to have more information about the cost of the various test procedures, at least in terms of the time commitment of skilled staff, although the practical aspects of the tests are well described.

The third section examines the viability of screening for cancer at specific sites and highlights the gaps in our knowledge.

Professor Miller has done a good job as editor, and, despite the large number of contributors (35 in all), the text is commendably clear throughout. It is unlikely that many readers will wish to work through the book from cover to cover, but the initial section on the principles and evaluation of screening will be interesting to all those concerned with planning and operating screening programmes, and may be recommended for community and occupational physicians in training. Later chapters will be useful to those concerned with the prevention and early diagnosis of the specific cancers covered.

Much work is needed before we can define the optimal role for screening in the control of cancer, and, as indicated in the book, several important research projects are in progress. It will be interesting to see a further review of the topic in five or ten years when the results of these investigations are available.

DAVID COGGON

Skin diseases at work

Essentials of Industrial Dermatology. Ed W A D Griffiths, D S Wilkinson. (Pp 168; £12·50.) Blackwell Scientific Publications. 1985. ISBN 0-632-00924-1.

Occupational medicine is now establishing itself as a worthy career to pursue. In the same way that general dermatology is often considered to be a nebulous subject to the general physician, so dermatology and its industrial considerations are to the occupational physician.

Those who work suffer from the same dermatological conditions as the rest of the community, but in addition many of them may be exposed to environmental hazards capable of inducing eczematous and non-eczematous dermatoses. Industrial dermatology or, perhaps more accurately, occupational dermatology consists of investigating and managing people with dermatoses who are working and whose problem is considered to be caused or aggravated by their employment. The evaluation of such patients may be both difficult and time consuming. Perhaps because of these factors only few of the 240 or so dermatologists in the United Kingdom have an active interest in occupationally related skin conditions.

Essentials of Industrial Dermatology tries to review the principal facets of occupationally related skin diseases. Most occupational skin disease is eczematous, and it is right, therefore, that most of the book should be dedicated to discussing various aspects of this particular dermatosis. Indeed, with the exception of a most interesting chapter on chemical induced acne there is little discussion of other occupational dermatoses.

As with all multiauthor books individual chapters are of a variable quality, but those chapters written by the two editors are of a high standard. One or two of the supporting chapters are poor. I was pleased to see informative sections on barrier creams and protective gloves. The short chapter on barrier creams dismisses the myth of the usefulness of barrier creams, pointing out that their definitive protective value has yet to be proved. A barrister has contributed a useful section on the principles of litigation about dermatitis. For those who find the law confusing this dissertation should make matters clear.

The book is intended for the factory or occupational medical officer who has no specialised knowledge of dermatology. It is a small, readable book, and the style is usually clear. Overall I think it succeeds admirably in its aims.

In future editions a few scattered but irritating errors could be corrected—for example, there are mistakes in the reading list. One or two chapters need to be removed or rewritten, and a glossary of terminology would be useful.

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