LETTER TO THE EDITOR

Anonymous postal surveys

Further to Doctors Campbell and Waters' article in the recent issue of the Journal (March 1990, p 75), we would like to report our experiences of an anonymous postal questionnaire survey which extends their observations. A postal survey was recently undertaken in three further and higher educational establishments in the Tyne Tees area, to ascertain students' AIDS related knowledge, attitudes and behaviour, and opinions on an HIV information pack supported by the Health Education Authority. The survey was administered anonymously for three reasons: first, to gain access to a "private register", ie, the academic register; second, to satisfy the local Ethical Committee's proper concern for confidentiality; and third, because of our hope that anonymous questionnaires would elicit frank and honest answers on sensitive issues.

A random sample of students was drawn from the academic registers of the establishments by their staff using a sampling technique specified by this research team. Questionnaires were sent to students (n = 1874) with our covering letter stating that they could not be identified. Anonymity was preserved as no identifying information was recorded on questionnaires. The research team was not aware of the identity of students, and similarly staff in the establishments would not identify respondents as completed questionnaires were posted direct to the offices of the research team. Unlike Doctors Campbell and Waters' surveys, two reminders were sent to all of the students, the first two weeks, and the second six weeks after the initial posting. The covering letter with the reminders made it clear that this was a reminder and students were asked not to fill in the questionnaire if they had already done so. Objections to both the initial mailing and reminders were rare.

A response rate of 49% was achieved by the time the first reminder was sent out. On the day the second reminder was posted, the response rate stood at 64%. Our final response rate was 74%.

One problem with anonymous reminder questionnaires is that respondents may return more than one questionnaire. The data were examined to find those students for whom establishment, age, sex, type of residence, age at first sexual experience, number of partners and alcohol consumption was the same. The handwriting in matching questionnaires was compared to identify duplicates. This process took one researcher three days. Twelve questionnaires were definite duplicates.

We agree with Doctors Campbell and Waters that postal surveys are a useful means of obtaining information for planning health education programmes in the field of HIV and AIDS. However, their study shows that anonymous questionnaires do not yield high response rates. Ours demonstrates that if circumstances necessitate an anonymous method, a satisfactory response rate can be obtained with reminders.

A major disadvantage of this approach is the additional cost of sending reminders to the whole study group. In our survey we administered 5600 questionnaires in total, about 2000 of which went to students who had already completed questionnaires.

R MADHOK
R McEWAN
R S BHOPAL
A McCALLUM
School of Health Care Sciences
University of Newcastle upon Tyne
Newcastle upon Tyne NE2 4HH
United Kingdom

BOOK REVIEWS

One Man's Medicine. A L Cochrane (Pp 283; £14·95.) BMJ Publications, 1989. ISBN 0–7279–0277–6.

This is Professor Archie Cochrane's autobiography completed, after his death, by coauthor Max Blythe. Richard Doll's foreword spells out the elements of the story in a few phrases—a combination of idiosyncrasy and wit, war and peace, drama and science, and of battles against obscurantism. Dick Cohen expands the theme in an introduction—providing a precis of what is to follow. Richard likens the book to a "well constructed novel". Dick's account suggests that it must be at least a Hemingway. Curiously, Hemingway appears in Archie's story in the context of the Spanish Civil War—to be dismissed in two uncomplimentary words—but this is *not* a novel.

First, although there is drama in the events recorded, there is none in the manner of telling. Dramatics are avoided: evaded. Archie had drama visited upon him, but it was not a style to his taste. He was too fond of understatement and of paradox, the eccentric twist in the tale. He could make a joke from almost anything. Under a bombing attack in Crete he penned . . .

". . . remember if you pass this way
To pause and say:
'There is a corner of a Cretan lane
For ever Spain' " . . .

and, later, his delicious socio-scientific-medical dogma that "all effective treatment should be free".

Second, it does not have the structure of a novel. There is no plot: no lesson spelled out. This was not Archie's style. The messages are there, but they have to be read between the written lines. This is rather the seriatim story of events as they happened: an expansion of a diary. This is an account of the present as driven by the past, rather than converging to illustrate a revealed grand theme. Grand ideas were the stuff that dictators were made of, and he *did* have an explicit message here. He lived through the lives and times of the worst despots of modern history and he saw their crimes, the greatest in the history of mankind. He outlived them all. He was especially glad to have outlived Franco and to return to Spain.

This book will be read with pleasure by everyone who knew him. But what about those who did not? What a difficult judgement! Many of the references to people and events are so brief that a full appreciation depends upon personal acquaintance with the author and his colleagues, and direct experience of the medical and academic background against which the later part of his story unfolded. But I suspect they will.

E G KNOX

Health Promotion: Models and Values. R S Downie, Carol Fyfe, Andrew Tannahill. (Pp 183; £12.95.) Oxford University Press, 1990. ISBN 0–19–261739–7.

The 1980s saw an explosion in interest in the concept and practice of health promotion. This was reflected in the proliferation of postgraduate specialist courses (there are now over 10 in the UK), and the development of basic and postbasic training for professionals in fields as diverse as medicine, teaching, and community work. Until recently there has been a dearth of books which students and practitioners could use to obtain an overview or introduction to the subject. This situation is now starting to improve with the recent publication of several books which have looked at aspects of the theory and practice of health promotion. The publication of this book is therefore both timely and welcome.

As the title suggests this is neither a text book nor a recipe book setting out "how to do it". Rather the three authors draw on their diverse experience in public health medicine, social science research, and moral philosophy to explore and clarify the principles and values which underpin health promotion. They contend that unless we have a clear understanding of what health promotion is, what we are trying to achieve and why, and the values which underpin practice, we are unlikely to be, or be seen to be, effective.

The book is in two parts. The first considers concepts and definitions of health, health education, and health promotion and draws up models for good practice. It also includes a chapter on evaluation and another which discusses the application of these models. The second part of the book consists of two chapters on attitudes and strategies for change, and three chapters which explore the value base of health promotion, in particular liberalism, autonomy, social justice and citizenship.

Overall I think this is a book that anyone interested in health promotion will want to read, though readers without some previous knowledge of these issues and the health service will find certain parts somewhat obscure. The first part is essentially an elaboration of the health promotion model developed by Tannahill over the last few years and many of the ideas will be familiar to readers of his previous journal articles. I personally find his model useful both as a basis for teaching and designing programmes. I am sure that students would find these chapters a useful adjunct to lectures and I have already incorporated some of the models into my own teaching.

However the book is not without its weaknesses and on balance I was somewhat disappointed. Although the text is clearly written, with the main points summarised at the end of each chapter, at times it reads too much like the work of three individuals rather

than a cohesive whole. I was surprised at the general lack of any serious attempt to locate the authors' perspectives within the context of current debates in the field, particularly with respect to theory, as for example articulated in the pages of Health Promotion, Health Education Research, and recent books sponsored by the Research Unit in Health and Behavioural Change and WHO Europe. There is no mention, let alone discussion of, the Ottawa Charter. Finally the choice of focus seemed, at times, somewhat arbitary. There is a chapter on evaluation but none on priority setting or programme planning, for example. Devoting two chapters to attitudes and how to change them struck me as somewhat bizarre in a book on health promotion, particularly when the fundamental questions set by the authors—"Are attitudes predictive of behaviour? Will a change in attitudes necessarily result in a change in behaviour?"—are neither seriously addressed nor answered.

AMANDA AMOS

Atlas of Disease Distributions: Analytical Approaches to Epidemiological Data. A D Cliff, P Haggett. (Pp 300; £100·00.) Blackwell, 1988. ISBN 0–631–13149–3.

Disease mapping has a long tradition in epidemiology. Now with the availability of small area statistics and powerful computerised mapping packages there has been a resurgence of interest in cartographic techniques being applied to health related data. There is now immense competition between software companies jostling to provide interactive mapping packages and geographical information systems to health authorities and academics.

However, much of this mapping activity is reduced to a plotting of points, drawing of circles, or shading of areas on maps. It seems at times as if a powerful visual display can make people suspend their critical faculties. As the authors acknowledge, it is essential that apparent geographical patterns are not merely artefacts of the mapping process. If disease maps are to be a serious aid to the epidemiologist then they need to be handled with as much care and critical attention as any other source of evidence. This book is a contribution to this process.

Cliff and Haggett bring together in one text the major cartographic methods available for mapping medical data and devote most of the chapters to issues of analysis and statistical techniques available. In addition to the more familiar techniques for examining spatial variation in disease they also explore in some detail the analysis of time series and space-time interactions. All of these are discussed in relatively simple terms and in the context of a concrete mapping problem using real data. The more technical material is presented in useful appendices.

Data from several countries on a wide variety of diseases are used but with a heavy emphasis on infectious diseases. Since quite a few cancer atlases are already available with useful statistical appendices the omission of cancer data sets is not that serious. However it would be useful if the next edition dealt in more detail with the chronic diseases.

In a fast developing area like disease mapping any major text is going to miss important developments. One of the classic problems for disease mapping is the conflict between using the incidence rate (which produces maps dominated by areas with small populations) or the significance level (dominated by areas with larger populations but perhaps little public health importance). The book, which was finished in 1987, was prepared too late to discuss the important Bayesian techniques described by Clayton[1] which help solve this problem.

The book is clearly written and well presented. Each technique is demonstrated on a data set and this allows comparison of different approaches. It is well references and annotated. Not only will this book be useful for the epidemiologist and medical geographer but also those involved in health service planning and research.

TREVOR A SHELDON

1 Clayton D, Kaldor J. Empirical Bayes estimates of age-standardised relative risks for use in disease mapping. *Biometrics* 1987; **43**: 671–81.

Mind, Stress and Health. R Totman. (Pp 224; £14·95.) Souvenir Press, London, 1990. ISBN 0–285–65085–8.

The structure of this book obeys the British convention that it is churlish to be destructive without offering constructive criticism. It is also its main weakness. In the first part, Totman shoots down the balloons of beliefs that diet causes heart disease or cancer, diagnoses margarine madness, and scorns the bran panacea. It is disconcerting that an experimental psychologist can spot premature conclusions and unjustified inferences in works by professional epidemiologists and public health experts who congratulate themselves for providing "scientific" evidence. (The most ruthless dissection of the rotting diet-heart corpse was carried out by Russell Smith, also a psychologist, in his massive report *Diet, blood cholesterol, and coronary heart disease*, available at $85 from Vector Enterprises, 1930–14th St, Santa Monica, CA 90404.)

If diet and disease, or rather national diet and national health, is a non-starter, why do people get ill? As the title of the book hints, it is all due to stress. Critical powers, which the author flashed so brilliantly in the first part, die out in the second half like sparks on smouldering paper. The Type A personality walks in and dominates pages on heart disease. Studies which failed to confirm type A as a risk marker are ignored. Political and sociological aspects of this typology are not explored. Wasn't the type A personality invented to fit into the myth that coronary heart disease was a "managerial" disease? Why else was type A typically a middle aged white American male earning a higher than average salary? And who are the B types? Those who are not A, by definition? Zaki Strougo in the 1989/90 winter issue of *Projections: La santé au futur* calls the A type hypothesis a moral model, in which a heart attack is the price that the ambitious, aggressive, assertive egoist pays for striving to emulate the glorified model of overachievement in the capitalist society.

Totman makes a special plea for the relationship among psychological stress, personality, the brain, the immune system and disease. He marshals the best available evidence for the psychosomatic model and for the stress-disease hypothesis. The trouble with this explanation is that it explains too much, or, to put it negatively, it cannot be falsified. Immunological speculations, intended to serve as a solid scaffolding to the melting wax model, are straws swaying in the wind of evidence. The structure hangs together by the strength of conviction.

Having aired my "positivist" prejudices, I happily acknowledge that this is a well-written, stimulating book, informing us competently about what the psycho-somaticists are up to.

PETR SKRABANEK

Applied Mathematical Ecology. Eds S A Levin, T G Hallam, L J Gross. (Pp 491; £35.) Springer-Verlag, 1989. ISBN 3–540–19465–7.

As one sharing the interest of *JECH* readers in the influences of environmental forces on patterns of disease, I have wondered occasionally where points of intersection might lie with other groups of environmental scientists. This volume of articles, based upon presentations at the Second Autumn Course on Mathematical Ecology, provides some enlightenment with respect to one discipline. The description of ecosystems and the use of predictive modelling for environmental management appear to remain the central concerns of ecologists. However, Levin, in his brief introductory overview, indicates a debt to ". . . applied imperatives arising from . . . epidemiology . . ." as contributing to current advances in (ecological) mathematical theory; and half the book is given over to topics in epidemiology, with an additional smattering of demography. (Other areas included in the book are resource management, ecotoxicology and population biology. Additional presentations at the Course covered ecosystem processes, behavioural ecology, nuclear war and population genetics.) To absorb the book fully would require a reasonable grounding in mathematics. Nonetheless, the principles underlying most sections are accessible, although the book is not worth purchasing for this alone. Most of the reference lists are now dated by three to four years, which may limit the value of the work for the specialist.

The epidemiological niche which falls within the ambit of the mathematical ecologist is quite specific: modelling infectious diseases, including practical implications for prediction and control of epidemics. While the level of presentation is not basic, the section on epidemiology gives a good sense of fundamental issues and approaches to modelling infectious diseases in humans and other animals. Practical questions addressed include a brief and clear evaluation of the effectiveness of measles immunisation; a more extended informative description of the complexities of trying to describe influenza occurrence mathematically; a very good chapter assessing the relative merits of different strategies for vaccination against rubella; and two chapters on HIV and AIDS modelling, including an outstanding paper by May and Anderson (both chapters are current, with references to 1988/9).

In summary, this is an interesting book, giving a window on the practical themes of quantitative ecology and a good intermediate level feel for the state and utility of modelling infectious disease processes. Probably one for the library rather than the office bookshelf for most of us.

CHRIS BAIN