

LETTERS TO THE EDITOR

Maternal diet and atopic eczema

I read with great interest the findings of Burr *et al*¹ on the environmental factors and symptoms in infants at high risk of allergy. They have studied an exhaustive list of environmental factors. I would like to draw the attention of the authors to the role of mother's diet during lactation on the development of atopic eczema in high risk infants.

Ranjit Kumar Chandra *et al*² in their prospective randomised control trial showed that eczema was less common and milder in babies who were breast fed and whose mothers were on a restricted diet (exclusion of milk and other dairy products, eggs, fish, peanuts and soya beans). The omission of this variable of mother's diet may lead to some amount of confounding bias in studying the association of breast feeding and development of atopic eczema. Burr *et al* have recommended a few precautions for mothers with the family history of eczema who breast feed their children. Based on our present knowledge regarding the role of mother's diet during lactation these mothers should be advised to avoid allergenic food during lactation. Obviously the nutritional state of the mother should be closely monitored and she should be given professional dietary advice.

1 Burr ML, Miskelly FG, Butland BK, Merrett TG, Vaughan-Williams E. Environmental factors and symptoms in infants at high risk of allergy. *J Epidemiol Community Health* 1989; 43: 125-32.

2 Chandra RK, Puri S, Hameed A. Influence of maternal diet during lactation and use of formula feeds on development of atopic eczema in high risk infants. *Br Med J* 1989; 299: 228-30.

P BADRINATH
Postgraduate in Community Medicine
Dept of Community Medicine
KMC, Manipal-576119
Karnataka State
S India

The authors reply as follows:

I agree with Dr Badrinath that the trial by Chandra *et al* shows that the incidence and severity of eczema in breast fed infants can be reduced if their mothers avoid certain foods. In our study the lactating mothers in the intervention group were advised to restrict their intake of milk to $\frac{1}{2}$ pint (284 ml) daily, but otherwise we did not restrict their diet.

MICHAEL L BURR
MRC Epidemiology Unit (South Wales)
4 Richmond Road
Cardiff CF2 3AS

Could natural killer cell activity be linked to the reduced incidence of cancer in schizophrenic patients?

In a recent issue of your journal (Vol 43: 43-7), Dr P B Mortensen reported on his findings of alterations in the incidence of cancer among schizophrenic patients.¹ Of particular interest was his finding of the reduced risk of cancer among male patients in

general, and reduced risk of certain types of cancer among females. Dr Mortensen very eloquently described a number of possible explanations for these findings, including: differences in diagnostic practices, altered exposure to carcinogens, reduced sexual activity of hospitalised female patients, and possible inhibition of tumour growth by neuroleptic medication.

I would postulate an additional explanation linked to possible intrinsic immune differences between schizophrenic patients compared to the general population. Wang *et al* have reported increased natural killer cell activity (NKA) in a group of forty non-medicated schizophrenic patients in comparison to matched controls.² Natural killer cells are a type of non-B, non-T lymphocyte which directly attack and destroy tumour cells.³ An increase in NKA could play a role in protecting these individuals from neoplasia. DeLisi *et al* tested this hypothesis in 1983 by studying NKA in a group of schizophrenic patients. They found the mean NKA similar to controls; however, their results were difficult to interpret as the majority of subjects were medicated at the time of evaluation. Although Dr Mortensen points out that neuroleptics have been reported to inhibit tumour growth in animal experiments, they have also been shown to impair immune function by decreasing lymphocyte mitogen stimulation and NKA.^{4,5} Therefore the findings of Wang *et al* may more accurately reflect the status of NKA in schizophrenic patients.

As future psychoimmunological investigations study this patient population, perhaps research findings will further elucidate possible explanations for the reduced incidence of cancer among schizophrenic patients.

1 Mortensen PB. The incidence of cancer in schizophrenic patients. *J Epidemiol Community Health* 1989; 43: 43-7.

2 Wang QD. Preliminary study on natural killer cell activity in peripheral blood lymphocytes of schizophrenic patients. *Chinese J Neurol Psychiatry* 1987; 20(4): 215-6.

3 Herberman RB, Ortaldo JR. Natural killer cells: their role in defenses against disease. *Science* 1981; 214: 24-30.

4 DeLisi LE, Ortaldo JR, Maluish AR, *et al*. Deficient natural killer cell activity and macrophage functioning in schizophrenic patients. *J Neural Transm* 1983; 58: 99-106.

5 Ferguson RM, Schmidtke JR, Simon RL. Concurrent inhibition by chlorpromazine of concanavalin A induced lymphocyte aggregation and mitogenesis. *Nature* 1975; 256: 744-5.

J STEPHEN McDANIEL
Emory University School of Medicine,
Department of Psychiatry,
PO Box AF,
Atlanta, Georgia 30322,
USA

BOOK REVIEWS

Social Dilemmas in Cancer Prevention. Ed B A Stoll (Pp 140; £25.) Macmillan Press, 1989. ISBN 0-333-48733-8.

There is little doubt that if the incidence of cancer in a local community might be drastically reduced by employment of a

public health physician continuously to wave a magic wand, the career opportunities, prestige and even remuneration of such doctors would be immeasurably better than they are today. At present, all that communities get from the public health physicians they employ is advice about smoking, drinking, diet and sexual activity and about the need to subject selected individuals from within the community to regular examinations of an uncomfortable and embarrassing nature.

This little volume examines very many of the issues relating to whether most cancer might be avoidable and exhibits many of the dilemmas confronting both individuals and society in seeking to apply available knowledge of cancer aetiology and preventive and screening techniques to the attempt to reduce cancer incidence and mortality. The issues range from general public ignorance of cancer (although a comparable medical professional ignorance is not mentioned) through economic imponderables to questions of the potential conflict between public good and individual autonomy.

Much of the book is the work of its editor, and indeed these sections are so comprehensive and well informed that one wonders why others were invited to contribute. These others have contributed a useful and clear chapter on diet and cancer, a mildly provocative one on leisure related cancer, an excellent summary of the evidence on radiation and cancer and on social class and cancer. There is also a rehearsal of the familiar Dublin scepticism about screening related to breast and cervical cancer.

The book is directed to the general reader rather than to doctors and so far as its exposition of the medical issues is concerned I should judge it to be very successful. I wonder, however, if the general reader might not be more demanding than doctors usually are about the treatment of the social and ethical issues that are raised but hardly discussed, and perhaps about the occasionally sloppy use of expressions such as "value-judgment" and words such as "disinterest". Nevertheless, as an overview of issues in cancer prevention it must be assessed as both well informed and balanced. This combination of virtues is sufficiently rare to merit commendation when it arises and to make this book well worth reading.

ALWYN SMITH

Child Health: The Screening Tests. A Macfarlane, S Sefi, M Cordeiro. (Pp 57; £4.50.) Oxford University Press, 1989. ISBN 0-19-261768-0.

Until recently, child health surveillance has been in some disarray. Responsibility for the service has been divided among general practitioners, health visitors and clinical medical officers; there has been little agreement about the tests that should be performed, by whom and when; and, perhaps reflecting this diversity of approach, remarkably little evidence has come to light about the advantages accruing to children who are screened regularly in the preschool years.

A measure of order began to emerge in 1989 with the publication of two important documents. The first was the report of the Joint Working Party on Child Health Surveillance, *Health for All Children*. Reflecting the interests of the Health Visitors'

Association, the Royal College of Nursing, the Royal College of General Practitioners, the British Paediatric Association, and the GMSC, the report laid out a model programme of preschool surveillance that could, so the Working Party believed, be justified by the scientific evidence that was available. The second document was the new contract for general practitioners, which introduced a new paediatric capitation allowance for general practitioners who provide an approved surveillance programme in their practices, and who are suitably trained to carry out the tests.

This book (one of whose authors was a member of the Joint Working Party) is the first postcontract guide for general practitioners about the screening of preschool children. Like the others in the series, it is intended to provide a concise, readable and practical guide that is likely to be consulted as much by health visitors as by the general practitioners at whom it is aimed. The screening programme described in the book is virtually identical to that proposed by the Joint Working Party, covering neonatal examinations, congenital dislocation of the hip, vision and hearing problems, heart disease, head circumference, weight and height problems, and cryptorchidism. Each topic has a brief epidemiological introduction, followed by detailed descriptions of the procedures involved in carrying out the tests, the criteria for passing or failing (a curiously anachronistic turn of phrase), and the circumstances in which the child ought to be referred. Brief suggestions for further reading are given.

This is unquestionably a most timely book, not least in offering general practitioners a quick check on whether it will be worth their while to undertake the necessary training to qualify for the new allowance. Its cook book format is plainly one that will appeal to most general practitioners, and if it is at all widely read it should substantially enhance the quality of surveillance in general practice. Whether it will be instrumental in bringing a measure of unity into a damagingly divided service is not a fair criterion against which to judge this particular book, but its success probably depends at least in part upon the responsiveness of general practitioners to the incentives introduced in their new contract.

J R BUTLER

Living Standards during Unemployment Vol 1. The Results. P Heady, M Smyth. (Pp 68; £10.60.) HMSO, 1989. ISBN 0-11-691271-5.

Reports from the Social Survey Division of OPCS are to be welcomed and one on unemployment especially so.

It is extraordinary just how little work has been published on the effects of unemployment from the UK—a country which could have specialised in this field in view of the size of the problem throughout the eighties. Almost no research has been commissioned or sponsored by the Department of Health and Social Security.

This new survey involved two interviews with a sample of about 3000 families whose breadwinners started to sign on in 1983 aged between 20 and 60. The first interview took place in the autumn of 1983 after they had been signing on for three months and the second interview took place a year later. The

survey was designed to see how living standards changed over the first 15 months of unemployment and to compare the circumstances of families whose breadwinners continued to sign on with those whose breadwinners returned to work. Most families experienced a rapid and substantial reduction in their material living standards. The main areas affected were food, clothing, and leisure activities. The psychological impact was considerable and was almost as great in the case of the wives of the unemployed men as in the case of the unemployed men themselves. As expected, the psychological wellbeing improved amongst those returning to work. For those who continued to sign on, the psychological scores for both men and their wives remained the same. There appeared to be no further deterioration or improvement over time. This result confirms the findings of Warr¹ that after an initial deterioration on first becoming unemployed, people's sense of psychological welfare tends on average to stabilise and not worsen over subsequent months. I have a number of criticisms of the report concerning the delay in publication, the form of the publication and the scope of the research.

The five year delay between data collection and publication is particularly unfortunate in a situation where definitions of "unemployment", of "eligibility for signing on" and the "levels of benefit" have changed frequently and dramatically. The report gives repeated caveats against drawing any conclusions that might pertain to 1989 and reminds us that the findings are clearly relevant "only to 1983/84".

The report is published in two volumes and separates the Results (Volume 1), with 1500 copies being printed, from the Technical issues and Methods. I have not yet seen the size of Volume 2 (with 2000 copies being printed) but the Results volume is only 68 pages long. The separation certainly makes the report less valuable for research purposes, as does the very limited reference section. The size of the print run suggests a limited readership.

The scope of the research itself was limited. It emphasised the loss of income and its effects but failed to address the impact of the loss of what Jahoda² called the secondary benefits of work. If going to work is not just about earning a living but also about activity, engaging in something productive, meeting people outside the family, enforcing a timetable on the day, about self esteem and status, then what is the effect of such a loss?

The authors simply asked informants what they had found the worst aspect of being unemployed. They then used a series of twelve questions used by the MRC/ESRC Social and Applied Psychology Unit to investigate the impact of unemployment by computing a "psychological wellbeing score". The method was not designed to detect the loss of Johoda's secondary benefits, nor was it likely to pick up characteristics that worsen over time with persistent unemployment.

Nevertheless, I found the report particularly easy to read. It is coauthored by Patrick Heady and Malcolm Smyth. Although an attempt has been made at marketing, with a new design for the front cover including the introduction of colour (somewhere between pale purple and off grey), it still looks anonymous. Why not a biographical note? Why not a brief history of the OPCS Social Survey Division and a list of

their recent publications? Dust covers and back covers have important uses beyond informing readers that HMSO accredited agents can be found in the Yellow Pages.

S C FARROW

- 1 Warr P. *Work, unemployment and mental health*. Oxford: Clarendon Press, 1987.
- 2 Jahoda M. *Employment and unemployment: a socio-psychological analysis*. Cambridge: Cambridge University Press, 1982.

Statistics with Confidence, Ed MJ Gardner, DG Altman. (Pp 140; £7.95.) Medical Association, 1989. ISBN 0-7279-0222-9.

Contributors to medical publications have become increasingly aware of the need to apply statistical tests of significance to their data. Although this has represented an improvement on previous practice, statisticians have been aware that an overdependence on significance tests has developed. In most instances, the use of confidence intervals to complement significance tests will be vastly more informative.

In Britain, the British Medical Journal has been foremost in recognising the need to improve the standard of statistical presentation of data and has published several series of articles with a statistical theme. Even more importantly they have published statistical guidelines to which papers submitted to the BMJ are required to conform. These guidelines emphasise the importance of using confidence intervals.

This book arises directly from these origins, and indeed Part II consists of one chapter presenting the statistical guidelines and a second chapter giving check lists for assessing the statistical content of medical studies. The previous eight chapters cover the rationale for the use of confidence intervals and then detail methods for their construction. The great value of this book is that it presents, in an easily understood form, the methods which will be needed in most situations. These include those for use with survival data, relative risks, odds ratios, standardised ratios and rates, and basic non-parametric methods. Most introductory texts cover only a selection of these methods. To have them all included in a single slim and well written text, together with worked examples, should ensure the popularity of this book with medical researchers. The availability of a computer program to carry out the calculations will further enhance its appeal to this audience.

Does the book also serve a role as a medical undergraduate text book? The intentionally narrow field of coverage limits its value here. The curriculum at many medical schools allows so little time for medical statistics that time could not be found to use this book effectively. Where time in the curriculum is allocated more generously, this book could well be a valuable addition to the reading list. Students will appreciate the clearly worked examples, but they will, perhaps surprisingly, gain just as much from the chapter on statistical guidelines for authors. These eighteen pages are, of course, directed at aspiring authors of scientific papers. However, they contain, in concentrated form, much of the statistical wisdom which we would wish students to assimilate.

In summary, this is a book which fills a gap in the literature. The editors are to be