The general aim of the *Focus on cancer* series is to bring together the knowledge of the wide range of people involved – biologists, pathologists, epidemiologists, hospital specialists, and community support teams. The editors and the authors of the various chapters, all respected experts in their fields, have definitely achieved this. Whether or not such concise reviews will be of value to both the “busy oncologist” (aren’t we all?) and all the other professionals involved is more difficult to assess. I certainly learnt a lot from the book. But, partly because there is so much information condensed into less than 200 pages, I did find the going rather heavy at times. And there are only a dozen or so tables (three chapters have none) and no charts, diagrams, or photographs at all. In addition, the referencing system seems mildly bizarre – the references for each chapter have been sorted alphabetically and then numbered, and are referred to in the text by the number – which means that in chapter 1, for example, the reference numbers appear in the order 14, 22, 15, 3, etc.

Screening (and not just for cancer) is, unfortunately, superficially a highly attractive proposition, particularly for the general public. “What, you can do a simple test to see if people have got cancer? Wow – let’s do it! Now! For everyone!”. Professional proponents of screening are also often highly enthusiastic. To counterbalance this, I feel that the sometimes harrowing implications for the individuals concerned of some of the problems frequently encountered, including direct harm from tests and false positive tests, as well as the enormous costs and organisational problems of population based screening, deserve wider attention and understanding by those who will be the subjects. I think that it would be extremely valuable if some of the sound sense and science in this book could be put in a more readily assimilated language and format for the general public and the media.

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Surveillance of mortality in the Scandinavian countries 1947–1993 (Studies in social security and health 4). By A Sakari Haro. (Pp 342, no price stated) Helsinki: The Social Insurance Institution, Finland, 1995. ISBN 951-669-392-X.

This book takes routine national mortality data from four countries and demonstrates how it can be used to describe, monitor, project, and compare mortality. It systematically addresses a set of questions about time trends, age and sex differences, median age of death, cohort changes, likely causal factors, and the future situation concerning mortality. All of these questions relate to the four countries under study – Sweden, Denmark, Norway, and Finland.

Analysis is carried out on total and all cause mortality, as well as 16 specific categories of

deaths. These include major causes such as cardiac diseases, malignancies, and different kinds of injury and poisoning. But the book also includes an interesting analysis of deaths due to senility, symptoms, signs, and ill defined conditions. Liver cirrhosis and tuberculosis are included as diseases for which mortality is not necessarily declining. The book ends with a review of some of the socio-economic and behavioural factors which may explain some of the changes identified.

Surveillance of mortality in the Scandinavian countries contains a mass of data presented clearly in manageable tables in the text, as well as in more detailed appendix tables. These are augmented with many clear graphs.

The review serves three main purposes. Firstly, it provides a detailed account of mortality patterns in Scandinavia. It sets out how the countries differ, why this might be and whether there are signs of convergence in trends. Secondly, it is an important study of health variation in a corner of Europe. But thirdly, it provides a model of the epidemiological methods used in the surveillance of mortality. It provides the student or practitioner with a clear and illustrated demonstration of the complications that have to be taken into account. It shows how to use techniques such as standardisation and birth cohort analysis. Most importantly, it draws attention to the need to understand how deaths are classified and how this may vary over time and place.

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Effects of atomic radiation: a half-century of studies from Hiroshima and Nagasaki. William J Schul. (Pp 397; £35.00) Chichester: Wiley-Liss (John Wiley & Sons), 1995. ISBN 0-471-12524-5.

This is the story of the scientific investigations which followed upon the explosion of uranium and plutonium devices at Hiroshima and Nagasaki in the summer of 1945. Much has been written of the science and much about the events, but their bringing together in this book is a unique and engaging synthesis.

Since 1945 and up to the present, the survivors of the atomic bombs have been intensively studied. They comprise a cohort of some 100 000 individuals of whom over half are still alive 50 years after the events. Their radiation doses, at an average of 100–300 mSv, are comparable to the cumulated experience of occupational, medical, and general populations at risk. The main categories of study have been acute radiation related events and subsequently morbidity, mortality, and other delayed outcomes including genetic.

The initiative, originally called the Atomic Bomb Casualty Commission (ABCC), was born of times greatly different from our own. Idealism, guilt, humanity, and human curiosity were the drivers which impelled and

sustained the scientific work. In particular, there was the military imperative to know and understand the effects of atomic war, an eventuality that was more seriously contemplated as a likely event than it is now. It is of interest to note that early predictions of the societal and human impacts of the Japanese A bombs were as exaggeratedly apocalyptic as they have been for more recent events.

The ABCC was transformed into the Radiation Effects Research Foundation (RERF) in the mid-1970s to better reflect the fundamental nature of the work being done on the biological effects of radiation. By that time the true long term worth of the work being done had already been recognised internationally. The life span study (LSS) had provided the major contribution to the setting of radiation protection standards based on derived risk estimates. This work has continued through revisions, re-estimates of dose, etc, and continues to provide risk estimates which have proved comparable to others derived from occupational and medically-exposed populations.

Of particular public concern have been prenatal and transgenerational effects of radiation. In counter to this concern, the prenatally exposed populations of bomb survivors have shown a remarkable resistance to both short and long-term effects attributable to radiation. New challenges to risk estimates derived from A bomb survivors have come from the recent British controversy about nuclear installations and childhood leukemia and also from Chernobyl and childhood thyroid cancer. The A bomb survivor data, which showed no excess of transgenerational childhood cancer, is statistically incompatible with risk estimates derivable from the work of Gardner and others who have examined possible associations between leukemia clusters and nuclear sites. The recent demise of these radiation related theories would tend to validate the relevance of the A bomb survivor experience. On Chernobyl, it is too early to say.

An unlauded but highly necessary part of the work of ABCC and subsequently RERF has been in the accurate derivation of historical radiation exposures. The last such exercise in the mid-1980s resulted in estimates which are now considered likely to have underestimated a neutron dose to bomb survivors. This may lead to a frame shift in risk estimates in due course. Meanwhile, the account given of the ingenious pursuit of inanimate objects which may hold “imprints” of radiation doses due to isotopic change is a fascinating feature of the book.

The style of the author is lucid, measured, and learned in a pleasantly old-fashioned way. This is as befits a distinguished geneticist who has dedicated much of his career to the subject to hand. To encompass the range of science and the range of history which, of necessity, the author must be successful is a considerable achievement.

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