The practical problem in civil engineering, although less acute in the sense that pressures are not very high and work is in free air, is difficult to control because unskilled labourers working for whole shifts are involved rather than disciplined naval personnel diving often only for short periods. Men have been found to acclimatize temporarily to work in compressed air so that the chance of suffering an attack of 'bends' in standard conditions falls from 10-15% on the first day to 1-2% after 10 days. This clearly raises the question of whether decompression schedules should be framed for the new recruit, so wasting the time of the acclimatized, or whether they should be suited to the acclimatized at the expense of the recruit.

Despite gaps in fundamental knowledge of physico-chemical events, a rational foundation for the design of decompression schedule is emerging from studies of divers, and means for the prevention of bone necrosis are becoming clear from studies of populations of civil engineering workers.

R. A. N. HITCHENS

Medical Care: Readings in the Sociology of Medical Institutions. Edited by W. R. Scott and E. H. Volkart. (Pp. x + 595; 75s.) London and New York: John Wiley. 1966.

Medical sociology—an embryonic specialty in this country—is concerned with the application of sociological concepts and approaches to the broad field of medicine, drawing on the knowledge of anthropologists, psychologists, and physicians as well as of sociologists. This lengthy book, a collection of papers written mainly by eminent American social scientists, is a valuable addition to the stock of recent American books on the subject.

The choice of papers was influenced by the belief that sociology can make a relevant contribution to current problems in medical care. For example, the crisis in the Health Service (in so far as it is a crisis), is one of organization and delivery rather than of the quality of care. What is the proper function of the general practitioner in an era of increasing specialization? What are the implications for the quality of care of different methods of remunerating physicians? How are increasing standards of education affecting the relationship between lay and medical cultures? The sociological approach to medical institutions does not provide quick answers, but it helps us to realize that the practice of medicine is not simply a matter of diagnosis and therapy but also the focus of a social encounter between people with very different expectations of each other's functions.

The early papers are among the most informative, dealing with the socialization of the physician and his role in different cultural settings, under different systems of payment, and in different types of professional organizations. The second section deals with the lay system—how societies define illness, folk remedies, the decisions to seek care—and with the interaction between healer and patient. The third section looks at hospitals as social institutions and examines the roles of medical and administrative personnel, and the implications for patient care of certain features of the social structure of hospitals. 'Hospitals and the community' is the

subject of the last section, but the approach is more that of the economist than the sociologist, for it is centrally concerned with the allocation of scarce resources.

One striking omission is the lack of any reference to sickness and the physician's role in an industrial setting: for long a source of abundant material for the sociologist. Should the G.P. be concerned with sickness certification in a social security state? The editors must feel that there is meat enough for sociologists in this book and I suspect it is mainly they who will read it.

J. R. BUTLER

Prevalence of Osteoarthritis in Adults by Age, Sex, Race and Geographic Areas, United States, 1960-1962. U.S. Department of Health, Education and Welfare, Public Health Service. (Pp. 28; illustrated; \$0.25.) Available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C.

This report is based on X-rays of the hands and feet taken on a sample of 7,710 persons aged 18-79 drawn from the population of the United States of whom 6,672 were examined. Evidence of osteo-arthritis was found in 37%, the rate increasing steadily with age till at 75 years of age 85% were affected. These prevalences closely resemble those found in similar surveys in the United Kingdom and show the same tendency to a greater prevalence of severe disease in women than in men after the age of 50. The prevalence among negro men reached the high level of middle age some 10 years earlier than in white men. A similar pattern was not found among negro women.

Unfortunately, the pattern of joint involvement is not given in detail nor is there any information on the effect of occupation.

J. S. LAWRENCE

Complete Russian Course for Scientists. By M. Beresford. (Pp. 227; 25s.) Oxford: Clarendon Press: Oxford University Press. 1966.

The advances of Russian science and technology will be disputed by no one. The need for knowledge of such advances in the West is agreed by all. The translation of this need into reality is offered in the book by Mr. Beresford.

For a number of years the author, a lecturer in Russian, has run courses for scientists on the staff at the University of Manchester. This experience becomes manifest as early as page 3, where the initial difficulty of the Russian alphabet is simplified by the explanation that, in addition to many of the letters being similar to the English, a number of the remainder come from the Greek familiar to scientists (chi, pi, fi, delta, and so on). The rest of the book is as practical, right through to a table of Last Letters (Russian is a declined language) in the Supplement.

The book is designed for class use or for self study. At the end of every chapter there are exercises and, after the later chapters, reading passages. These gradually familiarize the student with reading scientific Russian. Nowhere will the reader learn how to explain to the inn-keeper that his postillion has been struck by lightning,

but he will find himself translating, with increasing confidence, passages on the moon, Pavlov, and electronic calculating machines.

At twenty-five shillings, this clearly printed book offers a new world to the serious student. It would be a great help for those who use it by themselves if a key to the exercises and reading passages were available.

W. R. LEE

A Symposium on Skin Cleansing. Reprinted from *Transactions of St. John's Hospital Dermatological Society*, 1965, Vol. 51. (Pp. 126.) Sponsored by Deb Chemical Proprietaries Ltd., Belper, Derbyshire. Copies available free to Medical Officers, Safety Officers, Nursing Sisters, and Works Managers.

Sponsored by Deb Chemical Proprietaries Ltd., the symposium began with an introduction by Dr. Feiwel. Some nine papers were delivered and a variety of subjects relevant to skin cleansing were presented.

The chemistry and physical action of surfactants, the formulation of skin cleansers, the nature of detergents, the estimation of irritancy of detergents on the skin, and the evaluation of skin cleansers were some of the notable subjects. Dr. F. R. Bettley gave a résumé of his extensive research in the field of skin permeability and factors which modify this.

Such subjects as the penetration of electrolytes into the skin were discussed as well as the toxic nature of detergents containing effluents on river fish.

Isotope study of skin penetration and chemical consideration of the keratin proteins removed from the epidermis by washing were all discussed.

The discussion which took place under the Chairmanship of Professor C. D. Calnan was lively and informative, and all this is well recorded.

The list of those taking part includes factory medical officers, dermatologists, physicists, chemists, and biologists.

These transactions form a permanent record of a most well conceived symposium and a copy of the transactions will be referred to again and again by dermatologists and industrial medical officers alike for answers to problems of increasing efficiency and decreasing irritancy of skin cleansers.

M. GARRETT

Precautions for Laboratory Workers who Handle Carcinogenic Aromatic Amines. (Pp. 6; no price stated.) 1966.

This short pamphlet issued by the Chester Beatty Research Institute is based on a code of practice for laboratory workers which was adopted by the Harlow Industrial Health Service from the code recommended by the then Association of British Chemical Manufacturers for the manufacture and use of products causing tumour of the bladder (Scott and Williams, 1957).

Regulations, now in draft, are likely to be introduced to ban the manufacture, use, and importation of the most potent of the recognized bladder carcinogens and to control conditions under which other less potent or

suspected carcinogens are made and used, but it is not certain how far these regulations will apply to laboratory and research workers. The risk under laboratory conditions may usually be less than it is in industrial manufacture and use, and it might seem that the precautions required in the laboratory need to be less stringent. It is, however, essential that adequate precautions are taken wherever proved or suspected carcinogens are handled. For this reason alone the publication of this pamphlet is timely and welcome.

In it are listed those substances which are generally accepted as occupational causes of cancer of the bladder. In addition, certain other compounds not specified either in the draft regulations or in the Prescribed Disease No. 39 Regulation of the National Insurance Industrial Injuries Act are mentioned. It is perhaps unfortunate that the nitrosoamines and the nitrosophenols are included *in toto* in this specification. Although some members of these groups are rightly regarded as possible carcinogens, they are not of industrial importance and there is no real evidence that such commonly used compounds as diphenylnitrosamine, dinitrosopentamethylenehexamine or paranitrosophenol are likely to be carcinogenic. The recent report (*Sunday Times*, November 13, 1966) that bladder tumours have appeared as a possible occupational disease in ratcatchers and that alphanaphthylthiourea (ANTU) had been used for this purpose long after it should have been withdrawn justifies the inclusion of this potentially dangerous substance.

The booklet recommends that all persons likely to use these substances should be warned of the risk and told how to avoid it. Procedures for labelling, handling, protection, and decontamination in the event of accident or spillage are detailed. This Code of Practice should be in every laboratory where there is such a risk and in the hands of every person who is likely to be exposed to any compound known or suspected to be carcinogenic.

T. S. SCOTT

REFERENCE

Scott, T. S. and Williams, M. H. C. (1957). *Brit. J. industr. Med.*, **14**, 150.

A Short History of Public Health. 2nd edition. By C. Fraser Brockington. (Pp. vii + 240; 30s.) London: J. and A. Churchill. 1966.

Professor Fraser Brockington's book is both a short work of reference for students taking the diplomas of public health and social science, and the various nursing courses, and also an introduction to the subject for the general reader. The fact that it now appears in a second edition shows how useful it has proved. Naturally it is largely confined, apart from the first three short chapters, to the history of public health in Great Britain since about 1760, for, as someone once remarked, the peculiar genius of the British people in the modern era is 'an infinite capacity for making drains'. It must be said that, packed as it is with useful information and telling quotations, the book is remarkably good value for the money. Not only does Professor Fraser Brockington trace the growth of public sanitary services in the