Book reviews

The work of the family doctor. R. M. McGregor, *O.B.E., T.D.*, M.B., Ch.B. Edinburgh. E. & S. Livingstone Ltd. 1969. Pp. 266. Price £2 5s. 0d.

Medicine is a blend of art and science and nowhere is this more true than in general practice where art has for so long had to make up for science's deficiencies. This is less true nowadays and the objective approach to practice is more to be seen in some practices than others. In this book Dr McGregor describes a practice in which the blend of humanity and objectivity approaches an ideal which can be achieved by only very few.

On the introduction of the National Health Service in 1948, the author introduced a sytem of morbidity recording into his practice, being among the first if not actually the first practitioner to do so. The system was operated with meticulous, almost affectionate care for over a decade, resulting in a mass of data of formidable size. This has been worked on the hard way, by hand and eye analysis, and the information distilled into tables which are clear, comprehensible and convincing.

The 18 main headings of the Classification of Morbidity introduced by the College have been used in arrangement of the tables and it is a pleasure to go through these, chapter by chapter, and to be able to weigh at a glance the load that this condition or that placed on the shoulders of the family doctor. Each of us has some vague idea of how the components of a practice day arrange themselves. Few can give chapter and verse to substantiate these impressions, listing under each diagnostic heading, sex, age group, degree of disability occasioned by the illness and details of hospitalization. The tabulations in each section are supported by narrative accounts which tell how far the circumstances of practice in a Scottish border-town may have influenced the figures. Here the art of practice cannot help showing through. Reasons are given for action taken, sometimes leading to failure as well as success, and deductions drawn as to how good work could be made better. Treatment is not dealt with at special length but readers in practice can readily infer the kinds of therapy advised, by no means all of it medicamentary.

The philosophy of the author comes through the pages of this book to a quite unusual degree and there is in consequence a graciousness of prose which must reflect the nature of the conduct of the practice, carried on, incidentally, purely under National Health Service rules. There cannot be another book quite like this for *The work of a family doctor* is the work of a quite exceptional practitioner from whom we would all do well to learn.

New aspects of human genetics. British Medical Bulletin. Volume 25, No. 1. January 1969. The Medical Department, The British Council. Pp. 118. Price 40s. 0d.

Professor L. S. Penrose carefully introduces the 16 essays on human genetics forming this first 1969 issue of the British Medical Bulletin and there is a very interesting biographical section on the many distinguished contributors. The eye of the general practitioner will quickly stray to Dr Geoffrey Dean's up-to-date abstract of his admirable little book on 'The Porphyrias'. This should surprise nobody, as the strange story of the young orphan girl sent with others to be wives to the first settlers of the Dutch East India Company is, one feels, what genetics is really about.

The sailing ship *China* carried an unexpected cargo in 1688, for the girl Ariaantji Adriaansse had the genetic constitution which would be expressed in her descendants as a mendelian-dominant heritable disease porphyria variegata. Within the fertile, tough and inbred white community of South Africa, Ariaantji was destined to found a porphyric line that remains today a hidden genetic load within this population.

This problem has been investigated and documented by Dr Dean since he emigrated to South Africa in 1947, and the ninth, tenth and eleventh generations of porphyric families have been examined and recorded within a population so closely knit that, "one million of the three million South African whites hold 40 family names and derive these names from 40 original free burghers of the company." This disease was benign until the coming of the sulphonamides and the barbiturate drugs, which precipitated a widespread series of acute and often fatal porphyric crises among the white and black porphyric victims all of whom, it seems, owe their genetic structure to the orphan girl, with her invisible export from Holland to the Cape in 1688.

As we read we realize the power of such a mendelian-dominant genetic expression, showing itself as an enzyme defect; and Dr Dean goes on to show us how, in the acquired or toxic form of porphyria, the enzyme defect can alter strikingly the appearance and development of children. The clinical photograph of one of the Turkish 'monkey

children ', gives a vivid idea of the effects of liver enzyme defects resulting from the illicit use of seed grain sprayed with the fungicide hexachlorobenzine and fed as bread to hungry children by their desperate mothers.

There is a brilliant paper on ' Enzyme and protein polymorphism in human populations ', by Professor Harris who gave us the introduction to the Oxford reprint of Garrod's *Inborn errors*, and the paper seems more real after we have read the terrible story of the porphyrias in their inherited and acquired forms. Another paper on ' Variations in the structure of human haemoglobin ', by Professor Lehmann and Dr Carrell, should be read after Dr Weatherall's fine clinical paper from Liverpool on the thalassaemia syndromes, which an increasing number of doctors will meet in their practices in areas where the immigrant population ratio is high.

There is much more that cannot be mentioned that will repay close study for surely medical genetics and general practice are always closely concerned about people as well as about their diseases. Dr Patricia Jacobs, who with her colleagues first reported the association between antisocial behaviour and an extra y-chromosome, contributes an important paper on ' Structural abnormalities of the sex chromosomes ', and Dr C. O. Carter writes on ' The genetics of common disorders '.

The chairman of the committee that planned this important work, Professor W. R. Court-Brown died on 17 December 1968. He had made a unique and outstanding contribution to the development of human cytogenetics, and we join our respect and sympathy with that expressed by the scientific editors to his family and to his colleagues.

Selected topics in medical genetics. Edited by PROFESSOR CYRIL A. CLARKE, M.A., M.D., SC.D., F.R.C.P. London. Oxford University Press. 1969. Pp. 282. Price £4 0s. 0d.

This work comes from The Nuffield Unit of Medical Genetics in the University of Liverpool. It is edited by Professor Clarke, who is its director and also professor of medicine. It will not be possible in a short review to name the many contributors, but each is an acknowledged expert in his chosen field, and the large clinical content of each article in no way detracts from the specialist authority of the book, which should be in every important library.

This monograph is the result of a request by the editors of the Quarterly Journal of Medicine for a review of medical genetics, and many of us will have seen these essays in the first two numbers of the 1968 sequence. The Oxford University Press has wisely given a wider scope to the project and the eminent authors have been able to give to their papers an extended and permanent form.

Sections dealing with pitfalls and problems in the interpretation of genetic clinical problems are salutary reading, for they confirm that genetic studies can never provide a soft option in medicine. Doctors who wish to reap the rich harvest from the fields of everyday practice, must undertake suitable and continuing postgraduate education that will call for sacrifices of leisure and for wise practice management.

It is no coincidence that so many geneticists, including Professor Clarke himself, are keen field naturalists, and we sense the size of the debt to Professor E. B. Ford of Oxford, so gracefully acknowledged in the preface. An increasing conviction that there is a deep unity underlying all genetic laws, and indeed the basic phenomena of life itself, illuminates many obscure fields of human illness, and none more clearly than that dealing with human inheritance.

Doctors have cause to be surprised that the genetic mechanisms of butterflies, carefully studied over many years, have enabled our understanding of the rhesus problem in man to be advanced to a point where, at long last, countless potential victims can be saved from disaster. We look forward to further applications of comparative evolutionary biology to other fields of medical inquiry. Such ideas are still unfamiliar, and this great discovery will remain both a landmark and a signpost pointing the way to fruitful co-operation between the doctor and the naturalist.

The often confused phenomena of genetic associations and linkages are discussed and illustrated by the Liverpool families showing tylosis (increased keratin on palms and soles), a skin disease where there also exists as a genetic association an enhanced liability to develop cancer of the oesophagus. The reader feels that it may be possible for him to add, by his own observations, to the sum of knowledge on an important aspect of malignant disease.

The vexed question of the modes of inheritance of diabetes mellitus in the young and in older patients is described, and generous recognition is given to the valuable contribution, in its 1965 survey, of the Royal College of General Practitioners, which provided evidence in support of the observation that there is a marked increase within the younger age groups in diabetes of the probability of the disease appearing in another sibling.

In the section on pharmacogenetics there is much new matter that deals with drug detected polymorphic states in man, and our attention is held by the remarkable genetic aspects of states of resistance to the full effects of drugs such as isoniazid. An examination of the rapid and slow inactivators concludes with a most valuable description of toxicological hazards associated with this phenomenon, illustrated by the development