

BOOK REVIEWS

Sir James Mackenzie, M.D. 1853–1925. General Practitioner. By MAIR, ALEX. Edinburgh and London: Churchill Livingstone. 1973. Pp. xii+366. Price: £4.00.

There are two professorships and two lectureships named after Sir James Mackenzie. The outlines of his life and work are well known and the annual lecturers of the Royal College of General Practitioners have kept his memory green, but McNair Wilson's *The Beloved Physician* is his only biography and this was published 18 months after he died. Wilson, the medical correspondent of *The Times*, had only known Mackenzie during his later years and his biography, though colourful and eminently readable, could not assess the lasting significance of Mackenzie's work. It is now out of print. This new work places Mackenzie in his true perspective.

Mackenzie was born in 1853 at Pictonhill near Scone in Perthshire, the third child of a small farmer. His education was patchy; he started work as an assistant to a chemist in Perth and through his own endeavours matriculated at Edinburgh. He was a successful though not a brilliant student.

After a resident appointment in the Royal Infirmary he became an assistant with Drs Briggs and Brown at Burnley. John Brown had been Joseph Lister's dresser and had helped Mackenzie, giving him advice on various occasions. In 1882 Mackenzie gained his M.D. by thesis written from general practice. In Burnley he began to study patients who presented with heart symptoms. What he found did not coincide with what he had been taught, nor could he find help from his textbooks.

In 1890 he devised a method of recording simultaneously the impulses of the radial artery, the jugular vein, and the apex beat. Between 1890 and 1899 he published numerous papers, not only on the pulse but also on pain and sensory disturbances. In 1902 he published *The Study of The Pulse* which rapidly brought him international fame. When he realised that his work was considered important and that he was being sought out by many distinguished physicians, after long thought, he set up as a consultant in London. There, although he was ignored by all but a few disciples, he eventually succeeded in establishing a prosperous consulting practice and was appointed to the staff of several hospitals. In 1918 he 'retired' to St. Andrews, where he opened in 1919 the St Andrews Institute for Clinical Research, incorporating the general practitioners of the town in the project. He died in 1925.

These are the bare bones of Sir James Mackenzie's life work. It is a fascinating story: in telling it Professor Mair has brought together much new information; for instance the extent of the correspondence with Wenckebach of Groningen, and his

collaboration with Sir Arthur Keith. The puzzle of the whereabouts of the bundle of His is an example of the way in which two research workers can help each other even when living far apart. Mackenzie needed an anatomist, Keith a clinician: the hearts of Mackenzie's patients sometimes made a journey to London from Burnley, to find their last resting place in the London Hospital museum.

Professor Mair traces the development of this at first insecure general practitioner into the polished, but tough and rugged, man at the top of his profession. Mackenzie was a natural writer; his output was enormous and his style lucid. This must have been due to his wide reading. (Surely the *Hound of Heaven* which was a great favourite of his was by Francis Thompson and not by Walt Whitman as stated in the text?) His appreciation of good writing is evident in a letter to Osler who had sent him a copy of *The Student Life*. He wrote: "I have read it with that pleasure which I read one of Lamb's and I consider it quite fit to rank with one of his best in its quaint humour and its pleasant pungency."

Mackenzie's thoroughness and industry were enormous. At the turn of the century the German spa of Bad Nauheim was popular for the treatment of heart disease under the regimen of the doctors Schott: indeed, it was considered important enough to receive a paragraph in Osler's textbook. When Mackenzie's late partner, John Brown wrote that he was considering taking his wife there for her congestive heart failure, Mackenzie replied that he was unable to decide on the efficacy of the régime without personally assessing it. So to Bad Nauheim he went. He was not impressed and wrote to Schott giving chapter and verse for his unfavourable conclusions.

At the height of his powers Mackenzie was often asked to lecture in the New World, though in London he was still ignored. As he got older he taught more and more the importance of clinical signs and would admit mechanical aids as merely confirmatory evidence. He had little time for the ECG, was not impressed with the usefulness of x-rays in the examination of the heart, and for a long time he seemed to pay little attention to the estimation of the blood pressure.

It was the realisation that these signs could be found in their early stages in the field of general practice where there was a sufficiently static population to allow of prolonged study which made him choose St Andrews for his Institute. It is an indication of the strength of his personality that he was able to get his ideas accepted by the practitioners of the town: this must have been no mean feat at a time when the pressures and competition of practice were so much greater than they are today. So long as he was able to control his institute himself it prospered but, as Dr R. J. F. H. Pinsent showed in his James Mackenzie lecture of 1962, when the driving force

was removed a gradual decline set in, until the Second World War ended its active existence.

Professor Mair produces an illuminating letter from Sir Walter M. Fletcher of the Medical Research Council: "The aspect that chiefly strikes me", he wrote, "both for novelty and germinal importance is your Institute as a *training school* for practitioners. There is nothing like it, I think, elsewhere, and I hope from this seed will spring a training system all over the country." Much that Mackenzie was striving for in 1919 has now taken shape.

This is a biography which all who are interested in the development of the mind of a great physician, in the evolution of general practice and its future should read. As is not unusual in these days a few criticisms of the detailed production of the book can be made. The format is good; it is generously illustrated, but there is no list of plates. There are a few 'literals' which should have been picked up and one or two dates have suffered—for instance Linne's *Genu Plantarum* was published in 1737 and not in 1838 as stated. But these are minor errors in a most readable biography.

R. M. S. MCCONAGHEY

Illness and general practice. BENTSEN, BENT GUTTORM 1970. Pp. 192. Oslo: Universitets for Laget. Price \$16. Distributed in UK by Cannon House, Park Farm Road, Folkestone, Kent.

This book recounts the methods and findings of a retrospective survey of general practice in the Nes municipality of Norway, covering the years of 1952–1955. The aim of the study was "to construct a picture of the entire medical practice, morbidity, and consequences of disease in the population of a geographically limited area".

By comparison with Britain, Norway is a country of relatively isolated, small and static communities. In rural areas migration rates from and into a doctor's practice are low (in Dr Bentsen's practice at that time apparently less than 5 per cent per year). This in itself has obvious investigative advantages. Against this must be set the difficulties of epidemiological research in a Health Service system which does not require patients formally to 'register' with a specific doctor—but leaves him free to move from one practitioner to another. In such circumstances any attempt to establish a complete picture of community morbidity necessarily involves a major investigative effort. Perhaps the most impressive feature of the first section of this book ("Problems—Materials—Methods") is the thoroughness with which Dr Bentsen approaches his task and the clarity with which he defines his method.

The remainder of the book describes his findings under three headings—"Medical Care": "Morbidity": and "The Consequences of Disease".

The section on Medical Care is concerned with consultation rates and some of the factors affecting these; with the use of investigations, and treatment

procedures; and with referral rates and admission to hospital. Both the similarities to, and the differences from, English practice are striking when Bentsen's material is compared with the English scene of that time. Perhaps most notable is the lower overall consultation rate per person "at risk" per year (little more than half the English figure): and the different pattern of consultation rate with age groups. Unfortunately, however Bentsen does not here distinguish between 'initial consultation' rate (largely determined by the patient) and 'follow up' consultation rate (largely determined by the doctor). Thus the interpretation of national differences, particularly in relation to the mode of payment to the doctor, is impossible.

It is however the comparative national prevalence rates of chronic illness which will hold the greatest potential interest for many readers. Here, the third section of the book ("Morbidity") runs into considerable difficulties. Some of these are obvious and inherent. First, the difficulties created by definition and nosology—particularly since the diagnostic labels attached in general practice are necessarily based on the clinical rather than laboratory data. The second, the errors inherent in reported (rather than total) morbidity records. But, thirdly, difficulties created by the methodology which Bentsen chose—in contrast, for example, to that used by the RCGP/RGO study of 1955 in Britain. For whereas the latter used a large population over a short period (one year), Bentsen used a small population (approximately 6,000) over a longer period (four years). This makes it difficult to have any confidence in the comparative national tabulations (e.g. table 55 relating to heart and hypertensive disease). Comparison is made more difficult also by the fact that the figures quoted from the RCGP/RGO report do not appear to tally with those contained in the report itself.

Difficulties of nosology are, of course, at their greatest in considering mental disorders. But here, two of Bentsen's findings correspond interestingly with British experience. First that patients recorded as having emotional disorders consult their doctors more frequently than those who have no such disorders recorded. Secondly that such patients also have many more somatic conditions recorded.

The reader, therefore, is often left with impressions of comparative morbidity rather than precise comparisons. Bentsen recognises this and in his review of asthma—bronchitis—emphysema remarks that "it seems certain that these diseases occur far less often . . . than in English investigations. The comparison, however, is difficult because of the differences in methods of investigation".

The final section of the book has many constructively critical comments to make on the organisation of Health Services and on the conduct of practices. Bentsen argues cogently for a careful balance between primary generalist, and