

Apart from the mental anguish of depressive illness, vividly portrayed in a quotation from William James, its recognition is vital because of the risk of suicide. Indeed, the author suggests that it is possible to think of suicide as the specific case fatality of depression. There are, however, several interesting distinctions, as well as parallels, between suicide and depression.

While depressive illness is commoner in women, men are universally found to have higher rates of suicide. In both sexes, however, the rates of both conditions increase with age. Depression and suicide are reported to be rare in Africans, but both may be increasing in American negroes, particularly so in the north. In England and the United States suicide is associated particularly with the two extremes of the social scale, while depression shows no consistent trend, in this respect differing strikingly from schizophrenia which is most frequent at the lower end. Again, the widowed and divorced are prone to suicide but not especially to depression. Both conditions are commoner in urban rather than in rural areas and both have a predilection for the spring. While depression is not known to have a consistent preference for any occupational groups, doctors and lawyers have among the highest and clergymen and teachers among the lowest rates of suicide. Attempted suicide, which is about ten times commoner, differs from actual suicide in a number of respects. The reasons for most of these differences are at present conjectural.

This book summarizes a wide range of information in a very handy form and is recommended to all who are interested in the subject. There are 358 references (up to 1967), tables that enable the reader to compare at a glance the results of different studies and a useful index. The cost, however, is decidedly depressing. D. W. K. KAY

## BIG SISTER WATCHES

### The Computer and Medical Care

By Donald A. B. Lindberg. Pp. xi+210. (Charles C. Thomas: Springfield, Illinois, May 1968.) \$12.75.

THIS is one of the few books about the application of computers to medicine that is likely to be understood by doctors, nurses and all those who help contribute to the care of patients, including computer personnel engaged on hospital projects. The presentation is both clear and lucid with little jargon, and technical terms are used discreetly. The author gives a very balanced view of the whole picture of the application of computers to the many facets of the hospital, indicating its difficulties and making plain that success in business does not necessarily imply success in the hospital world. Although the author has essentially a laboratory orientation, he does not let his training and interest obtrude into the description of other parts of medical care in the hospital.

The book begins with a review of the need to apply computer techniques to medicine in the everyday care of the patient and in teaching and research, for unless such methods are used the explosion of information will overtake the ability of doctors to deal with it. This then can only be met by rapidly increasing the number of personnel engaged in caring for patients. The importance of patient records is discussed as a key to the whole area of medical care and the ability of nurses, as well as doctors, to contribute essential information. The author is right when he suggests that the size of the medical record will increase with the increase of information about the patient, and it will need computer techniques to manipulate these data. The importance of a standard nomenclature in relation to spelling, synonyms and searching diagnostic records is well stated. The use of patient questionnaires as well as physicians to collect and record symptoms is discussed. The importance of all information being collected on to a central individual patient record is

essential both for on-going patient care and for interpretation and analysis at will.

Hospital laboratory systems and other investigative departments need computer techniques and the author in his own personal work shows how essential they can be. Nevertheless, he stresses the importance of distinguishing between aspirations and achievement, and this distinction is carefully made and amplified throughout the book.

The description of the various teaching computer programs which he has made available to Missouri illustrates the usefulness of the computer system, not only in undergraduate but also in postgraduate teaching. Following a discussion of the applications of computer techniques to a biochemical laboratory, there is a simple but effective discussion of the application of pattern recognition techniques to medical diagnosis.

The millennium has not arrived in this subject although it has been given much publicity in recent years. Nevertheless, this is one of the most interesting, clear and exciting expositions of the application of computers to the care of patients and deserves to be read by all doctors. It will be of interest, too, to computer personnel interested in the application of computer techniques to hospitals and will give them much needed background about the areas of application and the difficulties they are going to face in implementing a hospital rather than a business system.

J. ANDERSON

## WATER MAMMALS

### The Biology of Marine Mammals

Edited by Harald T. Andersen. Pp. xii+511. (Academic Press: New York and London, January 1969.) 200s 8d.

MARINE mammals were examined extensively by comparative anatomists and in recent years there has been a new burst of research activity on a much wider biological scale. So far as the smaller Cetacea are concerned this work has been helped by the introduction of large aquaria where an enthusiastic fee paying public supports the enormous expenses of keeping a potential laboratory. This has been amplified by the needs of naval research. But even before the Second World War, Gawn, a British Admiralty constructor, was attempting to find answers to naval architectural problems in porpoises in parallel with Sir James Gray's pioneer studies on locomotion.

The results of work on marine mammals have tended to be hidden in the specialist journals and in publication of symposia, or handled broadly in more popular works. The editor states that his book "will serve as an advanced text for teachers, researchers and students". Those aspects particularly associated with problems of marine life are presented by specialist authors. A. Jongsard deals with age determination and effectively summarizes the means of ageing Cetacea by such means as laminations in ear plugs and mandibles. But, strangely, he considers that because a review of ageing in Pinnipedia is available elsewhere he need do no more than mention them as an appendix.

The chapter on locomotion by Hertel amounts to the author's study on "hydrodynamics of swimming and wave-riding dolphins", but the almost total neglect of distinguished work in the English language literature could hardly be accepted even in a specialist journal let alone a reference book in English. Practically half the chapter is on wave riding which in any case amounts to no more than surf riding. The hydrodynamics of a popular dolphin sport equivalent to a human seashore pastime seems hardly a feature of importance when locomotion in the larger whales, Pinnipedia and Sirenia, as well as a great deal of Cetacean information from other workers, is totally ignored.

Deep diving is dealt with by the editor and G. L.