

Book Reviews

Research Methodology and Needs in Perinatal Studies. Proceedings of the Conference on Research Methodology and Needs in Perinatal Studies, held in Chapel Hill, North Carolina. Edited by SIDNEY S. CHIPMAN, ABRAHAM M. LILIENFELD, BERNARD G. GREENBERG, and JAMES F. DONNELLY. (Pp. xvi + 309; illustrated. \$16.50) Springfield, Illinois: Charles C. Thomas. 1965.

Perinatal mortality rates in the United States, like those in Britain, remain much too high in comparison with those observed in some other developed countries. During the previous 15 years in the United States the perinatal period became the subject of more research, leading to a growing realization that factors during the perinatal period might have an effect on subsequent child development and on the frequency of various morbid conditions during childhood. But high mortality during the perinatal period continued, despite outstanding medical and public health achievements in decreasing both maternal mortality and the risk of death after the first month of life. These were the main reasons why the North Carolina State Board of Health and the School of Public Health of the University of North Carolina convened a conference on research methodology and needs in perinatal studies. It was felt that it would be helpful for investigators to meet, in order to review and discuss their studies with an emphasis on the methodological problems encountered.

Basically two types of research pattern emerged. One was the *human population laboratory approach* in which the epidemiologist uses a particular population to study various types of problems. When he plans a specific research project he limits himself to those questions for which he thinks this particular population could provide answers. Examples of this type of research are the Columbia Fetal Life Study and our own Perinatal Mortality Survey. The other type is the *problem-orientated approach* in which an epidemiologist becomes interested in a particular problem and tries to obtain answers to a series of questions from whatever populations he deems appropriate. He actively seeks out different kinds of populations and sometimes peculiar kinds of populations. His only criterion is the ability to get an answer to a particular question or series of questions. This type of research is used in studies on prematurity, chromosomal studies, and so on.

It was felt that a need existed for a study intermediate

between these two extremes, employing various types of human population groups and using a number of different research approaches. All the studies presented at this Conference were either largely or entirely prospective. But it was felt that there was still a place for retrospective problem-orientated studies. This is because there is an urgent need for developing new hypotheses and new variables to study. New hypotheses are usually derived from clinical observation; from the analysis of data routinely collected in various population groups, such as vital statistics and data on the instance of notifiable diseases; from broad-ranging retrospective studies which, in spite of their limitations, are peculiarly adapted to exploring, very inexpensively, an entire series of questions; and from laboratory studies. The interrelationships between all these are complicated and important, and problems may be solved only by going from one to another and perhaps back again.

This book is full of excellent material and is packed, not only with information, but also with new ideas. It will be invaluable to all who work in the field of perinatal mortality. But it will be of value to others too. It is, after all, primarily on methodology, and the methods discussed have a much wider importance and application than the field of perinatal mortality.

But there are two criticisms that an English reader may wish to make. One is that the whole thing is almost entirely American: this includes almost every reference, and there does not seem to be even a passing word about our own Perinatal Mortality Survey of the National Birthday Trust Fund which, though it was not American, was, after all, an outstanding contribution to methodology in perinatal studies. The other is that the style is turgid and indigestible.

Gestational Age, Size, and Maturity. A Symposium on the Causes and Associations of Prematurity, based on the Proceedings of an International Study Group at St. Edmund Hall, Oxford, 1964. Edited by MICHAEL DAWKINS and W. G. MACGREGOR. (Clinics in Developmental Medicine No. 19.) (Pp. 115; illustrated. 21s.; \$3) London: Spastics Society Medical Education and Information Unit in Association with William Heinemann Medical Books. 1965. This quite short book is based on contributions to an