

ANNOTATIONS

MEDICAL BIOMETRY AND STATISTICS

AMONG textbooks on statistical methodology, the INTRODUCTION TO MEDICAL BIOMETRY AND STATISTICS, by Raymond Pearl has had a distinctive position since it was first presented in 1923. The publication of a third edition,¹ which is revised and much enlarged, will be welcomed by those familiar with the former editions, and this text should win many new users. This new edition retains the characteristics of earlier editions. It combines in one volume the methods and matter commonly designated as vital statistics or demography and the methodology of analysis based on the theory of probability, measurement of variation, and of correlation. As in previous editions, Dr. Pearl has emphasized the fact that this is an introductory textbook written especially for medical students, and for medical and public health readers and research workers. The data and examples of application of methods used throughout are selected for their value and interest to these groups. Illustrative data have been increased and brought up to date, and the addition of many references has brought the reading lists up to date. In spite of the many statistical textbooks, new and revised, which have been published in the past few years, *Medical Biometry and Statistics* should continue to hold its uniquely useful place for persons in the fields of medicine and public health.

Nearly half of this book is devoted to a discussion of the "raw data of biostatistics" and methods for their collection, tabulation, and presentation. Record forms, problems of sampling in the collection of data, and graphic methods are adequately and fully treated. The chapter on rates and ratios interprets and describes the computations for the various quantitative expressions used for the data of vital statistics, and includes definitions for prevalence and incidence rates which are so commonly misused. This chapter and that on adjusted death rates is recommended to

¹ Pearl, Raymond: INTRODUCTION TO MEDICAL BIOMETRY AND STATISTICS. Philadelphia and London, W. B. Saunders Company, 1940.

every reader and user of mortality and morbidity data. The chapter on life tables has been enlarged and its value enhanced by the inclusion of detailed instructions for the construction of abridged life tables by the method developed by Reed and Merrell.

The latter half of the book deals with the theory of probability, the measurement of variation, correlation, and simple curve fitting. In a new chapter on the measurement of variation, Dr. Pearl has included several topics not usual to textbooks on statistical methods; for example, the use of deciles as class limits for frequency distributions, and a description of coefficients of racial likeness and group divergence. On the other hand, methods are omitted which are now widely used by statisticians. It seems unfortunate that space was not made for at least a brief reference to the t-test which is being used more and more frequently in dealing with small samples, since readers of statistical studies will inevitably meet this expression. The choice of material to be included in an elementary text is difficult, and the detailed exposition of topics included has produced a large book of exceptional usefulness, not only for beginners but also for research workers who have not specialized in the mathematical bases of statistical methods.

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TUBERCULOSIS AMONG MASSACHUSETTS SCHOOL CHILDREN

IN the first of a series of articles of which the purpose is to discuss certain epidemiological characteristics of tuberculous infection and disease, as revealed by the data from the school clinics of the Massachusetts Ten-Year Program, Dr. E. P. Hutchinson and Dr. Alton S. Pope¹ have outlined the procedure in the clinics and analyzed the incidence of infection, as shown by reactions to the von Pirquet tuberculin test, in the school population of twelve Massachusetts cities and a large group of smaller communities.

The survey period, 1924-1934, was divided into three parts with a different procedure in each. The study of incidence of infection is restricted

¹Hutchinson, E. P. and Pope, Alton S.: Tuberculosis among Massachusetts School Children. A Report on the Massachusetts Ten-Year Program. Part I. The Incidence of Infection. *The American Journal of Hygiene*, March, 1940, 31, No. 2.