

atry towards keeping periods of hospitalization short and minimizing the disability of patients while in hospital. While it is not possible to come to very firm conclusions on the basis provided in this publication, Dr. Norris has added substantially to the devices for looking more closely at the details of hospital patient flow.

This rather lengthy review of a meaty publication does not give a clear picture of the monograph. It gives, at best, some notion of the type of data to be found in the book and some notion of the reviewer's hesitancy in accepting all of Dr. Norris' conclusions. It also suggests, it is hoped, by some examples, the potential usefulness of the data to those with special interests in this field.

ERNEST M. GRUENBERG, M.D., DR. P.H.

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## HEREDITY COUNSELING<sup>1</sup>

THIS is a collection of papers presented at a symposium sponsored by the American Eugenics Society. The first part is a discussion of genetics in medical practice by representatives of four fields: pediatrics (J. Warkany), dentistry (C. J. Witkop, Jr.), public health nursing (Helen Dyson, Witkop, and Shirley Butters), and cardiovascular disease (V. A. McKusick). The second part is devoted to genetic counseling with contributions from L. R. Dice, J. V. Neel, C. N. Herndon, F. C. Fraser, F. J. Kallmann, S. C. Reed, C. P. Oliver, H. F. Falls, and W. J. Schull.

As is almost inevitable with its many authors, the book is diffuse, repetitious, and uneven. Many of the ideas will not be new to readers of this journal. But it does put on record the views of an appreciable fraction of the active genetic counselors on this continent, and can be read with profit by anyone interested in the problems of genetic counseling.

Dr. Warkany emphasizes the difficulties of distinguishing

<sup>1</sup> HEREDITY COUNSELING: Edited by Helen G. Hammons. New York: Paul B. Hoeber, Inc., 1959. Pp. xiv + 112. \$4.00.

hereditary cases from those due to other causes and points out that even a disease like achondroplasia, a standard textbook example of a dominant trait, is frequently sporadic. He, and several other authors, emphasize the necessity for the best possible diagnosis. Dr. Witkop's article on dentistry is notable for a list of inherited tooth conditions, with the probable mode of inheritance and, of course, a warning that phenocopies are frequent and that not all cases are inherited in the simple fashion indicated. He reports evidence for linkage of dentinogenesis imperfecta and PTC taster based on the paired sib method, which should be checked with more refined procedures. The chapter on public health nursing brings up a number of ideas. The authors point out the value of the nurse in case finding, in adding to the likelihood of successful treatment through early detection, and as the first professional contact for the parents of an affected child. There is an interesting description of the methods used, both in preliminary training of personnel and in actual research on a racially mixed isolate in southern Maryland. Dr. McKusick points out that, although there is considerable detailed knowledge about several individually rare diseases affecting the heart and circulatory system, information on the big killers—congenital malformations, rheumatic fever, hypertension, and atherosclerosis—is only slightly advanced over the stage of saying that “they run in families.”

The section on genetic counseling starts with a contribution from Dr. Dice, who draws on his long experience as a pioneer in this field. He discusses the organization of a counseling center and emphasizes the necessity for both diagnostic and genetic competence which can be achieved only by a close cooperation between the geneticists and medical specialists. The same point is made by Warkany, who suggests that counseling be done by a team that includes geneticists, pediatricians, and other specialists “well versed in the diagnosis, variability and nosology of the disorders to be evaluated.” He says that for the time being it would seem preferable to have a limited number of clinics (he would call them “parental counseling” clinics) with highly qualified staffs drawn from many disciplines rather than to spread the available talent too thin. A similar point is made by Schull who is concerned with the problem of poor advice.

He notes that "man has done fairly well for a good many thousands of years in the absence of genetic counseling" and suggests that we can afford to wait for 10 or 20 years until there is adequate personnel rather than do an incompetent job now.

There is an informative discussion of empirical risks by Neel. He points out that they are no substitute for exact etiological information, but they do provide a useful first stage. He also notes the importance of refining risks for different subsets of the population; for example, parental age might be considered in some risk figures. I would add that number of affected sibs should be considered, and in many cases the total size of sibship, which may offer evidence on whether an isolated case is a segregant from carrier parents or sporadic.

Dr. Kallmann discusses the personal problems in genetic counseling, and emphasizes the necessity for tact and empathy with the person seeking advice. Dr. Falls urges consideration of the person and the family, and not just the disease entity in giving genetic advice. Herndon discusses methods of referrals. He urges the importance of written records and strict observance of medical ethics. He points out some hazards of counseling by mail or telephone, particularly the problem of wrong diagnosis. Reed says that most genetic counseling in the future will be done by physicians; ergo, physicians should have better training in genetics.

That genetic counseling is yet an imperfect art is abundantly brought out. Almost all the authors point out difficulties. There is as yet no standardization of organization for heredity counseling. What should be the financial support? Should there be a charge for advice? How are the mechanics of referrals handled? Should there be counseling by mail or by phone? Should the counselor see the patient directly, or should he counsel through the physician? In general what are the moral and legal responsibilities of a counselor? To what extent is he liable to malpractice charges, or responsible for bad advice or for diagnostic errors? How far beyond stating probabilities and risks should he go in his discussions with the prospective parent?

It is no criticism of the book, but a comment on the present

stage of development of this potentially important branch of medical genetics to say that after having read the book the reader will find himself with many more questions than answers.

JAMES F. CROW

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## BUILD AND BLOOD PRESSURE<sup>1</sup>

NEW evidence that large variations in mortality are associated with body weight and with blood pressure is provided by the findings published by the Society of Actuaries in Volume One of BUILD AND BLOOD PRESSURE, 1959. The unfavorable effect of excess weight and of elevated blood pressure on health has been widely recognized for a number of years, very largely as a result of earlier studies by the Society of Actuaries. Insurance companies have a unique opportunity to study mortality over a period of years among large populations of policy holders for whom various individual characteristics are available, such as weight and medical impairments. This latest statistical analysis of mortality from 1935 to 1954 not only provides data on recent mortality experience for several million persons but also furnishes up to date measures of height, weight, and blood pressure. The findings no doubt will be carefully studied by professional personnel in the health field for significant implications to programs for promoting better health.

The study is based on the mortality experience of persons aged 15 to 69 years to whom Ordinary standard policies were issued in the years 1935 to 1953, except that in the build study policies substandard only because of weight are included and in the blood pressure study, those substandard only because of blood pressure are included. Data for persons with selected minor impairments who were eligible for standard insurance are included. The analysis is done separately for this group and the relation of specific impairments to variations in mortality according to build is shown. The population for whom

<sup>1</sup> BUILD AND BLOOD PRESSURE STUDY 1959. Vol. 1. Society of Actuaries.