#### MARCUS ROSENBLUM

### Second Conference on Research in Health Services

A SECOND CONFERENCE on research in health services, sponsored by the Health Services Research Study Section of the Public Health Service and supported by grant No. CH 00159 from the Division of Community Health Services, was held May 6 and 7, 1966, in New York City, with Dr. Donald Mainland, New York University, as chairman. (The first is reported in *Public Health Reports*, April 1966, pp. 351–362.)

With the earlier discussion of research methods and strategy in the background, the second round dealt mainly with lines or fields of investigation. The objective was to identify problems that warrant study, to encourage efforts toward such study, to contribute knowledge and ideas, and to review information and theories. Following introductory remarks to this effect by Dr. Kerr White, chairman of the Health Services Study Section, the conferees discussed several issues in specified aspects of health activity. The fields of inquiry reviewed were:

- 1. political aspects of health service, by Dr. Herbert Kaufman, department of political science, Yale University;
- 2. evaluation of health service demonstrations, by Dr. Edgar Borgatta, department of sociology, University of Wisconsin;
  - 3. the organization of medical practice, by

Mr. Rosenblum, secretary of the Committee on Science Communication, Department of Health, Education, and Welfare, is currently on detail from the Public Health Service to the Office of the Commissioner, Food and Drug Administration. Dr. E. Richard Weinerman, department of epidemiology and public health, Yale University School of Medicine;

- 4. the economic contribution of health services, by Dr. Victor Fuchs, National Bureau of Economic Research, New York; and
- 5. manpower for health services, by Dr. Dale L. Hiestand, Conservation of Human Resources, Columbia University.

In addition, the group discussed a paper on implications of organizational theory with respect to research in health services, by Dr. W. Richard Scott, department of sociology, Stanford University, who discussed allocation of tasks, evaluation of task performance, and the status structures in health services. The conference closed with discussion of a philosophical paper, speculating on the competitive values in American society and their implications for health issues of the future, by Dr. Kenneth Boulding, department of economics, University of Michigan.

A list of participants, in addition to the authors, appears on page 558.

The organization of the conference, like its predecessor, was of some interest in itself. All papers were assigned to be replicated and distributed in advance to all participants, along with copies of comments by two reviewers of each paper. With this information at hand, the meeting was open to further comment or exegesis by all in attendance.

The papers with brief summaries of the discussions are to be published in Part 2 of the October 1966 issue of the *Milbank Memorial Fund Quarterly*.

#### **PRIORITIES**

A system of priorities for research in health administration was proposed by Dr. Eveline Burns, Columbia University School of Social Work. Otherwise, she said, the manpower shortage, critical in most health activities, would be worst among investigators. She left open the issue of the method of setting priorities: the large Federal budget for research, on the one hand, implies discretionary judgment on the part of those who release the funds; on the other hand, investigators feel they are themselves best qualified to decide what to study, and that for good work the investigator has to be free to follow his bent.

#### **POLITICS**

The political implications of this issue were among the elements of decision-making which Kaufman proposed for study. Public health policy decisions, like all other governmental decisions, are political choices, he said, and publie health research and training are deficient to the extent that they neglect this inescapable component of the field. Public health researchers and administrators are generally taught to treat the problems in their profession as technical difficulties to be resolved on technical grounds alone. But, citing examples and analogies, Kaufman argued that this myth merely blinds them to the realities of their situation, giving an advantage to special interests who are more alert to and informed about the political factors in health issues and who do not hesitate to use this knowledge to get their way. Hence, he concluded, research in the political ingredient of public health should become a routine part of public health research and education generally.

#### MANPOWER

The manpower shortages in health services, as Hiestand analyzed it, are so pervasive that in this field priorities in research appeared to be absolutely essential. "In 1960," he said, "some 2.6 million persons were employed in the health services industry, and 291,000 were in selected health occupations in other industries. The central concern in health manpower research has been with physicians, who numbered

only 230,000 (234,000 including osteopaths) or only 8 percent of the total. Indeed, most attention has been paid to physicians in private practice, who comprise perhaps 75 percent of all physicians. Secondarily, attention has been centered on nurses, of whom there were 582,000 in 1960, not counting student nurses. The emphasis has been on hospital nurses, who comprise less than 70 percent of the registered nurses. The other manpower groups employed in the health services have received only sporadic attention."

Although the health professions are not unique in restricting opportunities for advancement, several commented on such limitations as a handicap in the use of manpower. Burns mentioned a study which demonstrated a high employee turnover in group work agencies where promotion from within was denied. The only possible opportunities for advancement then lay in changing employment.

Proposals for licensure in this context brought forth questions on the tendency of licenses to restrict mobility and to retard rather than assist upgrading. The system of credentialism likewise raised questions with regard to the concept of education as a continuum, offering advancement to all health service employees according to their capacities to learn and function as indicated by experience, performance, and study.

Seeing that the basic goals are effective organization of health services and their effective use by the public, Burns suggested that these goals raised basic policy issues with respect to plans for developing personnel and above all for determining research priorities. Boulding suggested that policies on information management also are basic to achievement of these goals.

#### **EVALUATION**

Evaluative studies to select priorities and to shape policies commanded attention from the conferees, with broad agreement that evaluation by those in charge of the projects studied were unlikely to be objective in their appraisals.

Borgatta contributed a list of reasons used to rationalize rejection of or resistance to evaluations of health services, such as, "The effects of "All the world over and at all times there have been practical men, absorbed in 'irreducible and stubborn facts': all the world over and at all times there have been men of philosophic temperment who have been absorbed in the weaving of general principles. It is the union of passionate interest in the detailed with equal devotion to abstract generalization which forms the novelty in our present society."—Alfred North Whitehead

the program are long-range and thus the consequences can not be measured in the immediate future."

Weinerman spoke of the prospect for an integral theory for the organization of medical practice, with emphasis on the social basis for medical practice, and attention to medical practice as an institution in its own right. He noted that in the past medical practice has been based on acute and episodic medical crises rather than on the prevalent chronic ills which create the most discomfort and disability, in effect, the major social needs.

#### **GOALS**

All these comments were pertinent to the questions posed by Dr. John Dunlop, department of economics, Harvard University. What is health? What are the contributions of various forces to health? How are the contributions to be measured? What drives people to endanger their health unnecessarily?

In response to the last question, Dr. S. M. Miller, School of Education, New York University, drew attention to underlying and competing values in society, trenchantly expressed by "Who gets what?" Such competing values, he pointed out, affect the pattern of any cost benefit analysis.

#### ORGANIZATION

Dr. Eliot Freidson, department of sociology, New York University, pointed out that while goals might be stated by participants and observers of the health service system, the professionals have substantial power to shape the goals or to resist programs they find objectionable.

Scott's review cited a host of learned studies which analyzed this interplay of social forces in the health services.

#### DISCUSSION

The following remarks are excerpted from the discussions.

On priorities. "It is my experience with social science researchers that it is much easier to get them doing something which is 'interesting' than something which is 'useful.' The interest stems from theoretical and not practical applicability."—William Erbe

On politics. "Local health officers are the real combat arm of the public health institutions, doing battle in the slit trenches against ignorance, superstition, fear, avarice, apathy, and many other factors not sufficiently appalling to rate mention.

"Talcott Parsons . . . contends that any social system may be subdivided into four functional subsystems: the adaptive (in which is located primarily the economy); goal attainment . . .; the integrative . . . (which generates social solidarity); and the latent (primarily concerned with pattern-maintenance and tension-management). . . . If the Parsons formulation . . . be taken seriously, . . . everything anyone does has a political consequence."

#### -WILLIAM ERBE

"The public health officer has to be a statesman in setting goals; achievement of the goals demands the techniques of politics."—George James

"The major battles for health services will be fought in the political arena."—Charles Schottland

"Inaction is a decision. And a thoughtless decision in response to pressures has long-range consequences."—HORACE DELIEN

"According to Vickers, public health progresses by a periodic redefinition of the unacceptable. Lung cancer today is a highly acceptable way to die."—George James

#### Conference Participants

Dr. Robin F. Badgley
Dr. Gilbert Barnhart
Larry E. Blaser
Dr. Philip D. Bonnet
Dr. Edgar F. Borgatta
Dr. Kenneth Boulding
Dr. Lester Breslow
Dr. Eveline M. Burns
Franklin B. Caffee
Dr. Duncan W. Clark
Edward J. Connors
D. Peter de Janosi
Dr. Horace DeLien
Dr. Paul M. Densen
Dr. John Dunlop

Marcus Kosenblum
Dr. Leonard S. Rosenfeld
Dr. Peter Rossi
Dr. Paul J. Sanazaro
Dr. Charles Schottland
Dr. W. Richard Scott
Dr. Frederick D. Sheffield
Dr. Patrick B. Storey
Dr. E. Richard Weinerman
Dr. Albert Wessen
Dr. James D. Wharton
Dr. Kerr L. White
Dr. T. Franklin Williams
Dr. Charles R. Wright
Dr. John Young

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On manpower. "Examination of incomes [in the health professions] reveals a substantial gap between the \$28,000 or \$32,000 per annum for practicing physicians and the \$5,000 to \$6,000 annual income of other health professionals holding at least a baccalaureate degree. There appears to be limited interest in either creating a middle class... by establishing new categories or permitting one to emerge through encouraging mobility."—WILLIAM KISSICK

On research. "Current Federal concern with cost benefit analyses stresses the importance of clear objectives and methods of measurement. With these in hand, all other elements of research may fall into line. Without them, research is fruitless."—Paul Densen

"Research in social sciences arrives at a series of successive approximations by methods which range from the quick and dirty, at one extreme, to elaborate experimental design at the other."—HERBERT KLARMAN

"Research is only a part of information and learning and must be seen as that if it is not to degenerate into a subculture.

"Information must be surprising. If you knew what you were going to find, you wouldn't have to do research. The strategy is to expect the unexpected, and grab it when it comes."—Kenneth Boulding

On evaluation. "Government needs a 12-hour administrative load.

"No existing human institution would survive in its present form the extension of active human life [expectancy] even to 200 years.

"The impotent do not have to worry about ethics."—Kenneth Boulding

"If society should some day elect to feed a painless death pill at random to patients in nursing homes, to reduce the aged population, I venture that a powerful movement will arise on the college campus to feed it to everyone over the age of 30."—Lester Breslow

"Drugs must... have scientifically demonstrated value or marketing will not be allowed. Why not require that each technique or activity in such a field as medical practice have scientifically demonstrated value?"—T. Franklin Williams

"I believe there is the possibility of a better life for old people, even though many of them now are . . . miserable and senile. . . . Compare . . . those old people whose care is managed by the Oxford (England) Geriatric Hospital with the life of old people in some nursing homes . . . where public medical care programs have introduced . . . incentives to keep people heavily sedated and thus invalided in bed."—Lester Breslow



Model State Emergency Health Service Plan. PHS Publication No. 1071-A-5; 1966; 51 pages.

Prepared for use by State health officials to assist them in preparing a plan for effective emergency health service operation during periods of national emergency or major natural disaster. Illustrates types of emergency operating documents and procedures which should be developed to meet the disaster health needs of each State. Includes policies, procedures, organization. function, staffing, and other factors governing emergency operation of State health departments.

State health plans based on this model are intended for application during national civil defense emergency; however, portions of the plan may be used during a major natural disaster.

Control Your Weight. PHS Publication No. 1481; 1966; leaflet. Accompanies an exhibit by the same title. Shows how persons can maintain proper weight and prevent overweight by maintaining a balance of diet and physical activity. Provides statistical material to support reasons for an adequate program of weight control.

Health Statistics From the U.S. National Health Survey. National Center for Health Statistics.

Comparison of Two Methods of Constructing Abridged Life Tables. By reference to a "standard" table. PHS Publication No. 1000, Series 2, No. 4; revised March 1966; 11 pages; 15 cents.

REPLICATION. An approach to the analysis of data from complex surveys. PHS Publication No. 1000, Series 2, No. 14; April 1966; 38 pages; 35 cents.

EVALUATION OF PSYCHOLOGICAL MEASURES USED IN THE HEALTH EXAMINATION SURVEY OF CHILDREN

Ages 6-11. PHS Publication No. 1000, Series 2, No. 15; March 1966; 67 pages; 45 cents.

CONCEPTUAL PROBLEMS IN DEVELOP-ING AN INDEX OF HEALTH. PHS Publication No. 1000, Series 2, No. 17; May 1966; 18 pages; 25 cents.

Personal Health Expenses Per Capita Annual Expenses, United States: July-December 1962. PHS Publication No. 1000, Series 10, No. 27; February 1966; 53 pages; 40 cents.

CHARACTERISTICS OF PATIENTS OF SELECTED TYPES OF MEDICAL SPECIALISTS AND PRACTITIONERS, United States, July 1963—June 1964. PHS Publication No. 1000, Series 10, No. 28; May 1966; 63 pages; 45 cents.

Dental Visits. Time Interval Since Last Visit, United States, July 1963-June 1964. PHS Publication No. 1000, Series 10, No. 29; April 1966; 54 pages; 40 cents.

NATALITY STATISTICS ANALYSIS, United States, 1963. PHS Publication No. 1000, Series 21, No. 8; March 1966; 29 pages; 30 cents.

HYPERTENSION AND HYPERTENSIVE HEART DISEASE IN ADULTS, United States, 1960–1962. PHS Publication No. 1000, Series 11, No. 13; May 1966; 62 pages; 45 cents.

UTILIZATION OF INSTITUTIONS FOR THE AGED AND CHRONICALLY ILL, United States, April-June 1963. PHS Publication No. 1000, Scries 12, No. 4; February 1966; 35 pages; 30 cents.

Study of Drug Purchase Problems and Policies. Welfare Research Report 2; March 1966; by Raymond F. Clany; 91 pages; 55 cents.

Reviews the programs and policies of American and foreign organizations that involve purchase of large quantities of drugs. Provides resource material for State public health and welfare agencies concerned with the operation of the new Medical Assistance Program for

public assistance recipients and other low-income persons, which was authorized by the amendments to the Social Security Act (title XIX).

Deals with methods of enabling physicians to prescribe economically without sacrificing the quality or efficacy of the drugs their patients receive.

Describes methods used by the Hometown Medical Care Program of the Veterans Administration, the Department of Defense, and various State programs of vendor payments for drugs used by public assistance recipients and the methods of the General Medical Service of Scotland and the National Health Service of England and Wales. Also includes descriptions of the prepayment drug plan of the Group Health Cooperative of Puget Sound, Seattle, Wash., and the drug purchase program operated jointly by the American Association of Retired Persons and the National Retired Teachers Association which sells both generic and brand name drugs to 7 million persons on a nonprofit basis.

Salaries of Dentists and Dental Hygienists in Local Health Departments. PHS Publication No. 1413; 1965; 44 pages. Provides salary data on 297 dentist and 403 dental hygienist positions in 173 local health units and describes a variety of selected local dental positions. Publication should be of special interest to dental program administrators and others working in community health programs.

This section carries announcements of new publications prepared by the Public Health Service and of selected publications prepared with Federal support.

Unless otherwise indicated, publications for which prices are quoted are for sale by the Superintendent of Documents, U.S. Government Printing Office, Washington D.C., 20402. Orders should be accompanied by cash, check, or money order and should fully indentify the publication. Public Health Service publications which do not carry price quotations, as well as single sample copies of those for which prices are shown, can be obtained without charge from the Public Inquiries Branch, Public Health Service, Washington, D.C... 20201.

The Public Health Service does not supply publications other than its own.



FOURNELLE, HAROLD J. (Public Health Service), RADER, VIRGINIA, and ALLEN, CLARISSA: A survey of enteric infections among Alaskan Indians. Public Health Reports, Vol. 81, September 1966, pp. 797-803.

Personnel of the Arctic Health Research Center, Anchorage, Alaska, interviewed 1,626 persons, or 73.4 percent of the approximate population (2,215) of 13 Alaskan Indian villages, to determine the prevalence of enteric infection among these people.

A total of 445 persons in the study group, or 27.4 percent of those interviewed, gave a history of diarrhea within a 19-month period. The highest attack rate, 54.6 percent, was in the 1- to 4-year age group. Children through 9 years of age had an attack rate of 38.1 percent. The onset of illness in 74.4 percent of the total number of patients occurred during July, August, and September.

Fecal specimens were cultured in the field for bacterial pathogens, and final

identification of cultures was made in the research center laboratory in Anchorage. Specimens for parasitological and virological examinations were placed in preservative fluids in the field and shipped to the laboratory.

Two bacterial pathogens were isolated from 4 of the 855 fecal specimens examined. Three isolates of Shigella sonnei and one of Escherichia coli 055:B5 were obtained. Entamocha histolytica was not detected. The parasitic infection rate was 42.1 percent. The degree of parasitism per person and the types found were not considered to be of etiological significance. Enterovirus ECHO 19, considered a possible diarrheal agent, was isolated once in 389 human fecal specimens examined for enteric viruses.

## JOHNSON, OLIVE G. (Long Beach Department of Public Health): Packaged computer programs for local health departments. Public Health Reports, Vol. 81, September 1966, pp. 849–854.

A demonstration project to illustrate model systems for reports and records through which data pertinent to health programs can be recorded and retrieved has been established in the Long Beach (Calif.) Department of Public Health.

Tabulations, designed by the persons who will use them and who select items pertinent to the evaluation of each program, are planned from source materials, and packaged programs for selected tabulations are being tested in local health departments. Programed instructions, flowcharts, and a user's manual are being developed.

Packaged programs also are being developed and tested to assist local health departments in obtaining administrative statistics pertinent to planning and evaluating programs. Criteria significant to each program are being selected, and the findings are being evaluated.

Methods used for basic systems and procedures are being appraised for their effect on services. With packaged programs and the installation of basic systems for records and reports, selected tabulations could be used by other health departments, which is the objective of the demonstration project.

# KENADJIAN, BERDJ (Department of Health, Education, and Welfare): Appropriate types of Federal grants for State and community health services. Public Health Reports, Vol. 81, September 1966, pp. 815–820.

Whether Federal assistance to stimulate and support State and local health services should be of a general type or for special purposes only has been controversial for many years. Historically, the Federal Government has moved increasingly to a more categorical and selective approach in assisting the health programs of States and communities.

The form in which assistance should be offered depends on the type of needs to be served. The health service needs for which Federal aid is required range from new programs in fields like alcoholism and accident prevention to the development of better balanced structures of health care for entire communities and States.

At present, Federal financial assist-

ance for health services is provided basically in three forms. These are the general health formula grant, the categorical formula grant, and the project grant. Objective analysis of the advantages and disadvantages of these three types shows that for some purposes one of the three forms is clearly preferable. For most purposes, however, the choice depends on a careful balancing of the pluses and minuses associated with each type. Further studies are needed to assess more carefully the merits and limitations of each grant type. Also, the establishment of more channels of dialog among Federal, State, local, and other authorities with interests in improved community health services would be desirable.



KELLY, SALLY (New York State Department of Health), and ALMY, RYDIA: Glucose-6-phosphate dehydrogenase deficiency in Project Head Start children. Public Health Reports, Vol. 81, September 1966, pp. 794–796.

Children attending Project Head Start were screened for glucose-6-phosphate dehydrogenase deficiency by Oski and Growney's histochemical method. Incidence of the defect in 135 Negro boys and girls tested was approximately 7 percent. Genotypes were not distinguishable. Followup was attempted by transferring the information to family physicians, the families, or to clinic records when available.

PETERSEN, NORMAN J. (Public Health Service), SAMUELS, LARRY D., LUCAS, HENRY F., and ABRAHAMS, SIMON P.: An epidemiologic approach to low-level radium 226 exposure. Public Health Reports, Vol. 81, September 1966, pp. 805-814.

An epidemiologic investigation of human populations exposed to elevated levels of radium 226 in drinking water identified 111 communities in Iowa and Illinois, with a combined population of almost 1 million people, exposed to a mean drinking water concentration of 4.7 pCi radium 226 per liter during 1950–62.

Based on a retrospective analysis of data from death certificates, this population group exhibited an adjusted bone neoplasm mortality rate of 1.41 deaths per 100,000 compared with a rate of 1.14 in a control population (P=0.08). An intermediate rate of 1.25 was exhibited by the populations in downstate Illinois and Iowa, which were not included in either study group but exposed to an estimated radium 226 concentration higher than

that in the control communities and lower than that in the exposed communities. The difference between the rates in the exposed and control groups was more significant in the population under 30 years of age than in the group 30 years and over. Some significant differences were noted between the bone neoplasm mortality rates of population groups with no apparent difference in radium 226 exposure.

A comparison of adjusted mortality rates from all causes of death in exposed and control communities with populations of more than 10,000 revealed no significant difference. However, the mortality rates in the exposed groups aged 0–9 and 30–39 years were significantly higher than in the control groups of these ages.

### SMITH, W. H. Y. (Alabama Department of Public Health): Blitz on syphilis in Alabama. Public Health Reports, Vol. 81, September 1966, pp. 835-841.

In five blitzes on syphilis, the Alabama Department of Public Health brought a significant number of persons, particularly women, to treatment in the primary stage of the disease. In these campaigns, conducted from April through August 1965, syphilis was diagnosed in the primary stage in 60 percent of the women with clinical evidence of the disease. In the Alabama statewide program during fiscal 1965, cases were diagnosed in the primary stage in only 37 percent of the women with clinical manifestations. Alabama data for fiscal 1965 indicate that in the primary stage spread of the disease to others is markedly less than in the secondary stage.

The blitz procedure in syphilis control is an intensive attack on the disease in which efforts are directed at rapid examination and treatment of all named contacts of interviewed patients with syphilis. During the Alabama blitzes, approximately two-thirds of the contacts

were examined within 24 hours, and 91 percent of contacts of persons with primary or secondary syphilis were brought to treatment.

Epidemiologic treatment (2.4 million units of benzathine penicillin G or an alternate antibiotic) was urged upon all contacts whose initial clinical examination and serologic test results were negative but who had been exposed to a person with infectious syphilis within the previous 4 months.

When six cases of syphilis were diagnosed in 1965 among inmates at a maximum-security prison, the health department staff also conducted a blitz there. Within 2½ days, 82 cases were diagnosed (an attack rate of 7.6 percent) and the patients treated; 209 contacts were epidemiologically treated. The remaining 785 prisoners also were given penicillin or an alternative antibiotic. Not one case of syphilis was diagnosed in the prison during the year after the blitz.