

# Programs, Practices, People

## Impact of TV Violence on Children

The National Institute of Mental Health has funded 23 research projects to focus on the impact of televised violence on the behavior, attitudes, and development of children.

The following three of the 23 projects illustrate the type of research to be conducted:

*Televised violence and dream content*, University of Wyoming. Sleep patterns of pre-adolescent boys will be studied for two nights after half of them view a TV film with violent content and the other half see a nonviolent film.

*Television violence and deviant behavior*, University of Maryland. Examining the relationship between TV usage and deviant behavior, the researchers will study the way teenagers use television—what they watch and how they feel about it.

*Children's responses to television violence*, Stanford University. How children perceive television drama, and particularly violent drama. Researchers will determine whether a child understands the motivations for and consequences of the violence he sees on the TV screen.

*Facial expression and media violence*, University of California. Facial expressions and gestures of 5- and 11-year olds will be filmed as they watch episodes of television programs.

Little uncontested evidence exists about the manner in

which people are affected by the ever-present television set. A number of research studies and various public hearings have taken place during the past 15 years; however, no extensive and coordinated research program on this subject has been previously accomplished.

The need for such research was highlighted in December 1969 by the report of the National Commission on the Causes and Prevention of Violence, which included hearings about violence on television, a review of existing research, and content analysis of a week of TV entertainment programming in 1967 and a comparable week in 1968. The Commission called for long-term studies and cited the importance of evaluating televised violence over an extended period.

The studies, which are being coordinated by the 12-member Surgeon General's Scientific Advisory Committee on Television and Social Behavior and a small staff at NIMH, have been allocated \$1 million.

The research includes questions on the medium, the message, and the individual viewer and his environment. The research projects now underway in the television and social behavior program fall generally in the following areas:

1. Defining the TV audience and its viewing patterns: What programs do people watch? What are their attitudes about the programs? How do they

watch TV? What is the viewing behavior of young children in family settings? While viewing TV, how do children interact with other children and with adults? When do viewers feel highly involved with programs?

2. Child's perception and understanding of television: What is a child's understanding of television violence, of the reasons for these acts, and of the consequences? What is the relative importance of fantasy and realistic programs in shaping aggressive attitudes and behavior?

3. Some immediate effects of television viewing: How does television influence the attitudes and values of the viewers? When children see violence as a means of resolving problems and as a successful and legitimate means to obtain personal ends, how does this affect their tolerance of violence? Can facial expression and gestures be used to measure television's impact on children? For preschool children, what is the impact of repeated exposure to violent and nonviolent films?

4. Defining the content and programs of television: How prevalent is televised violence? How realistic is the violence? What is the significance of the violence to the play's plot? What are the amounts and types of TV programming during a typical week?

An annotated bibliography of approximately 300 citations is now being compiled on much

of the published relevant research. It will be an up-to-date source of information on research already done in this general area.

In addition to an overall report from the Advisory Committee to the Surgeon General, expected to be made in about a year, individual reports from the various researchers will be made within the next 6 to 12 months.

### **Lithium Therapy for Manic Depressives**

An ancient drug that may have been used as long ago as the fifth century has been resurrected and shows high promise of being an effective treatment for certain kinds of mental illness.

The old compound turned new drug is lithium, recently licensed for use by physicians as a prescription drug. The drug is the most specific agent available for treating the manic phase of manic-depressive psychosis, and maintenance lithium therapy may protect some patients from recurring attacks of both mania and depression.

Lithium as an element in nature was discovered by a young Swedish chemistry student, Arfwedson in 1817, but there is some indication that it may have been unknowingly used long before as a treatment. The fifth century physician, Caelius Aurelianus, recommended the use of alkaline spring waters, probably high in lithium content, for the treatment of mania, a recommendation that became a tradition persisting for centuries.

Not until 1949, however, were lithium's psychoactive

properties first described by the Australian psychiatrist, Cade, who found it could restore manic patients to normal mood states. This stimulated great interest, and lithium seemed headed for wide, effective use.

This early promise for lithium was destroyed when the unrestricted dispensing of lithium salts as a taste substitute for table salt, particularly for patients with heart and kidney disorders, led to a number of severe poisonings and some deaths. The drug was restricted and practically abandoned, and only in the past few years have significant numbers of researchers turned their attention to lithium.

These and other facts about the drug are contained in a new, extensive report prepared by the National Institute of Mental Health's Program Analysis and Evaluation Branch and issued through the National Clearinghouse for Mental Health Information.

The report provides an integrated account of results of all major studies evaluating the effectiveness of lithium. It covers the history of lithium, treatment of mania and depression, prophylaxis of mood disorders, lithium and other psychiatric disorders, and general principles of clinical use. A section of notes and references is also included.

This report, "Lithium in the Treatment of Mood Disorders," Clearinghouse for Mental Health Information Publication No. 5033, is available for sale from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, at 60 cents each.

### **Drug-Resistant Tuberculosis in Children**

A comprehensive 4-year study of 325 children at Kings County Hospital in Brooklyn, N.Y., showed that a much greater number of children than adults fail to respond to the initial treatment for tuberculosis. The study revealed a disturbingly high number of drug-resistant strains of the tubercle bacilli which cause the disease, even to initial treatment with the most effective anti-tuberculosis drugs, including isoniazid, streptomycin, and para-aminosalicylic acid (PAS).

Laboratory culture studies on sputum specimens from the 325 children uncovered 103 children with untreated (primary) infections. Of the 103 patient strains of bacteria that were isolated and inoculated with antituberculosis drugs, 10 strains (9.7 percent) were found to be significantly resistant to isoniazid, 10 (9.7 percent) were also resistant to streptomycin, and three (2.9 percent) resistant to PAS. Several strains (6.7 percent) of bacteria showed resistance to more than one drug—four to isoniazid and streptomycin, one to isoniazid and PAS, and two to all three drugs.

Comparable laboratory studies of bacteria isolated from adults showed much lower bacterial resistance to antituberculosis drugs. In one 4-year study in New York City, for example, only 17 of the 758 strains tested (2.2 percent) showed resistance to isoniazid.

It is believed that many children acquire drug-resistant infections from adults who fail to obtain adequate drug treatment

for their own infections. In a previous report a close correlation was shown between the susceptibility patterns of drug-resistant strains isolated from children and the source adults. It was also shown that infection among the source adults, whether caused by primarily drug-resistant strains or strains resistant because of failure of initial drug therapy, could be transmitted to children.

Underscoring the potential hazard of primary resistant infection in children was the death of a 4-year-old girl from tuberculous meningitis. She was found to be resistant to both isoniazid and streptomycin.

Dr. Morris Steiner, Dr. Philip Steiner, and Harry Schmidt, who reported this study in the July issue of the American Review of Respiratory Disease, advocate a strict, close surveillance over treatment regimens for both adults and children.

### **Simulated Economy System Used to Treat VA Patients**

After 5 years of careful evaluation, a new treatment technique for long-term mental patients has received Veterans' Administration approval for general use throughout its nationwide system of hospitals and clinics. Success of experimental programs based on simulated societies at several VA hospitals was reported by Dr. John D. Chase, VA assistant chief medical director for professional services.

The treatment follows psychological principles of learning within a simulated economy that results in patients being rewarded for normal behavior and penalized for bizarre or

destructive behavior. These reinforcement techniques promote rehabilitation by strengthening self-confidence and reducing unnecessary dependence and feelings of helplessness.

The approach is to require each patient to take greater responsibility for things within his competence and then reward him for doing so. These include personal hygiene and toilet habits, grooming, eating, and other routine social and adaptive responses, as well as establishing effective work habits.

So that the patient will have an immediate feedback on the consequences, he is given a token by a staff member each time he makes an adequate response. The tokens are used by the patient to "buy" his privileges and needs at the hospital.

At 20 of VA's 166 hospitals, 27 so-called token economy programs are now in operation. The first was established in 1964. They involve 937 patients, most of whom are males in their mid-forties who have a longstanding psychotic disorder and who have spent many years in institutional settings. Almost 85 percent are chronic schizophrenics.

Guidelines on what necessities may be included in the token economy program specify that there must be provisions for fully protecting the health of the patient and his right to be treated with dignity and respect as a human being.

Other stipulations are that (a) each patient's treatment program and its duration must be individually determined, (b) members of the staff, including

those on night duty, must be carefully selected on the basis of attitude and aptitude and be trained in the techniques, and (c) patients must be selected for adaptability to the program and they must be fully oriented on the token economy approach including just what is expected and why, as well as the treatment objective, as far as they are personally concerned.

The Veterans' Administration considers token economy concepts adaptable to the treatment of chronic alcoholism and many other chronic adjustment problems.

### **Radiation Detector To Spot Dental Decay**

Equipment designed to examine lunar soil samples soon may find potential dental cavities in the University of Chicago's Walter G. Zoller Memorial Dental Clinic.

The device, an ionizing radiation detector, produced by the General Electric Corporation (GE), is being modified to study the density of tooth enamel in a project involving personnel from the university's departments of radiology and geophysical sciences as well as the Zoller clinic and GE. The project is funded by the Atomic Energy Commission.

When fully operational, the probe will enable one to spot areas on individual teeth where the enamel has started to dissolve and where dental decay is almost certain to start, even before there are any physical changes or decay that can be detected by current methods.

The device consists of a radioactive isotope, a radiation detector, and a radiation counter. The isotope emits a

stream of radiation in the form of beta particles. When this stream is aimed at a tooth, the particles that strike the calcium in the tooth enamel bounce back and are counted by the detector.

The counter records the data from all the small areas of the tooth and then prints out a model indicating those areas from which there were less than normal amounts of radiation backscatter. As the enamel of normal healthy teeth is equally dense all over, healthy teeth reflect the same amounts of radiation from all surfaces. Therefore, low amounts of backscatter indicate an area where the enamel has begun to dissolve.

Such areas usually develop into cavities unless the amounts of radiation backscatter are low due to abnormal and poorly formed enamel. In such cases low calcium concentrations will be found in surfaces of the teeth ordinarily immune to dental decay as well as susceptible areas.

The radiation dose absorbed by the patient is minimal—much less than the dose received from routine dental X-rays—and is definitely not detrimental to the patient.

According to Dr. Frank C. Besic, professor of dental surgery in the Zoller clinic and the Pritzker School of Medicine, the technique could provide a whole new aspect to dental care—a method for specific, local, preventive maintenance instead of simply repairing teeth after decay.

If mass produced, the equipment could sell for as little as \$2,000, about the cost of a dentist's chair.

## **Population Research Centers Program**

A population research centers program to augment current support mechanisms for population research is being initiated by the National Institute of Child Health and Human Development, National Institutes of Health. The program will be administered by the Center for Population Research.

Established in August 1968, the Center for Population Research was charged with long-term research in the social and behavioral sciences dealing with the causes and consequences of population growth, structure, and change. A correlated objective is to expand research in reproductive biology and thereby develop new methods of fertility regulation.

The population research centers program is intended to encourage creation and maintenance of environments favorable to research on population problems not readily investigated in other settings. It is anticipated that two to four population research centers will be supported during fiscal year 1971. Deadlines for applications will be February 1, June 1, and October 1, 1971.

From the applications, the National Advisory Child Health and Human Development Council will recommend for designation as population research centers organizations usually, but not necessarily, university based which the council deems qualified to carry out the purposes of the Center for Population Research. Such organizations must demonstrate their capability for conducting research and research training

likely to hasten progress toward solving population problems. The grant will provide core support for scientific personnel and administrative management, common equipment, central support services, and development of new research topics.

Although the National Institute of Child Health and Human Development cannot guarantee indefinite financial support, it is understood that the designation by the Institute of a population center does constitute a commitment to provide continuing support to the basic center operation for as long as the center performs in the manner judged, by competitive review, to be of high scientific quality and consistent with the mission of the Center for Population Research. Such a designation does not constitute a commitment for total support, for preference in the awarding of competing regular or program project grants, nor for support beyond a proportionate share of the funds available from the National Institutes of Health for the entire population program.

Detailed information about the program and application forms may be obtained from James F. O'Donnell, Ph.D., Program Director, Population and Reproduction Grants Branch, Center for Population Research, National Institute of Child Health and Human Development, National Institutes of Health, Bethesda, Md. 20014.

## **Grants for Community Treatment of Alcoholics**

Federal grants to help provide comprehensive community treatment and rehabilitation

services for alcoholics are now available for the first time. The National Center for Prevention and Control of Alcoholism of the Department of Health, Education, and Welfare's National Institute of Mental Health will administer the program.

Funds appropriated by Congress late in fiscal year 1970 represent a landmark step toward developing a national network of community-based treatment and rehabilitation programs for alcoholics. Such community programs will help not only the estimated 6½ million persons afflicted with alcoholism in the United States today, but also more than 20 million family members and others who suffer because of an alcoholic's illness.

Grants to assist communities in providing services for alcoholics were authorized in the Community Mental Health Center Amendments of 1968 (Public Law 90-574), but no funds were available for such grants until recently when more than \$3 million became available. An additional \$6 million is included in the President's budget request to Congress for fiscal year 1971.

The grants are to help cover the salaries of professional and technical staff members of new comprehensive services provided by either a community mental health center or another qualified public or private non-profit organization in the community. Grants may be awarded to these agencies for a period of 8 years on a matching-funds basis.

Agencies receiving grants must offer a comprehensive program including the following essential services: (a) inpatient

hospital care, (b) outpatient services, (c) intermediate services, such as a halfway house, partial (day or night) hospitalization, or other sheltered care, (d) emergency service, available on a 24-hour, 7-day-a-week basis for medical, psychiatric, and social emergencies, and (e) consultation and education services related to prevention and treatment of alcoholism.

The Federal matching funds may also be used to help provide additional services, such as vocational, education, or social services related to rehabilitation of alcoholics; for in-service staff training programs; or for research and evaluation of the alcoholism services provided. Limited funds are also available for constructing facilities to treat alcoholism.

Further information and application kits for the grants are available from the National Center for Prevention and Control of Alcoholism, National Institute of Mental Health, 5454 Wisconsin Avenue, Chevy Chase, Md. 20015.

### **Statement on Testing for Hepatitis Carriers**

The Board of Directors of the American Association of Blood Banks has approved a statement on the status of tests for identifying viral hepatitis carriers. The statement stresses that although testing for Australia antigen as a donor screening test continues to show exciting promise, the same problems which were described in the National Research Council statement, released in January 1970, continue to exist. Therefore, the association maintains that such testing cannot yet be reasonably performed

routinely and must continue to be regarded as experimental—primarily for purposes of research.

The National Research Council's "Statement on Laboratory Screening Tests for Identifying Carriers of Viral Hepatitis in Blood-banking and Transfusion Services" was published in the January–February 1970 issue of *Transfusion*. It noted in part that "... it is clear that the sensitivity and specificity of the test for Australia antigen vary among laboratories, and there is no agreement on the establishment of a uniform test or tests. Such agreement would be essential before any test could be brought into general use."

The American Association of Blood Banks maintains it is still necessary that a standard reagent of controlled potency be developed, that it be approved by the division of biologics standards, and that it be available in adequate supply. The association encourages those blood banks which are able to perform such testing and collection of data to do so, to hasten the development of standard tests which will be suitable for general use. It emphasized that the day of routine testing has not yet arrived. Most blood banks are now incapable of such research efforts, which demand additional facilities, funding, technical personnel, a constant source of serum, and the capability of producing consistently potent serum for tests. The extent to which such tests are performed will depend both upon the resources of the blood bank and the goals of the project.

The association statement points out that this screening

test, at present, will detect only a fraction of all hepatitis carriers. The size of this fraction has varied from investigator to investigator. At the present time many blood banks will find that they are unable to enter into arrangements to provide routinely blood which has been tested, with negative results, even though the blood bank's particular research effort involves large-scale testing.

### **Clinical Research Section at Indian Medical Center**

A new clinical research section has been established by the National Institute of Arthritis and Metabolic Diseases (NIAMD) at the Indian Health Service's new Phoenix Indian Medical Center, Phoenix, Ariz. Dr. Scott M. Grundy, assistant professor of medicine at Rockefeller University, New York City, is chief of the facility.

Studies by the Institute's epidemiologists have shown that gallbladder diseases and diabetes are much more prevalent among the Pima Indians of the area the new center will serve than among the general population of the United States. These disorders and others of concern to the Institute will be the focus of the new clinical research facility, which occupies the fifth floor of the new 200-bed medical center.

The unit provides 25 beds, examination and treatment rooms, a metabolic kitchen, and five laboratories, and brings specially trained clinical and laboratory researchers into close proximity to facilitate teamwork for the benefit of the patients.

Under HSMHA's Indian Health Service, the main hospital will

be a referral facility providing diagnostic services and specialized treatment for Indian patients from 10 peripheral hospitals and seven health centers in Arizona, California, Nevada, and Utah. Research patients may be drawn from any population served by the Indian Health Service in all 50 States.

In addition to the clinical research to be conducted in the new medical center, the NIAMD maintains related epidemiologic studies among the Indians through its Southwestern Field Studies Section, also based in Phoenix. Most of these studies have centered on the Pima tribe of the Gila River Reservation, located about 40 miles south of Phoenix.

### **Laser Cane Safety Tests**

The Laser Laboratory of the University of Cincinnati Medical Center, internationally renowned for years for the study of the safe use of lasers, has contributed to the perfection of a laser cane to be used as a mobility aid by the blind. The existence of the laser cane, still very much in its experimental stages of development, was featured nationally in August 1970 by the National Broadcasting Company's television network. It was first announced in the publication *Laser Focus* in July 1969.

In 1969 Dr. Leon Goldman, director of the Laser Laboratory, volunteered the unit's skills in safety testing to the Research and Development Division of the Prosthetic and Sensory Aids Service of the Veterans' Administration which had begun evaluating the laser cane. A cane was obtained by

the Laser Laboratory.

Robert G. Meyer, Laser Laboratory project engineer, worked with Dr. William T. Ham, chairman of the Medical College of Virginia's department of biophysics, to determine the amount of radiation emitted by the three lasers in the cane. They used the sophisticated and sensitive devices of the biophysics department to measure the emissions.

Detailed studies on the safety aspect under working conditions were done also by Robert Epstein, directing engineer of the Laser Laboratory. Epstein's report to the Veterans' Administration stated that the cane has an extremely low rate of radiation emission well within the safe limits for human usage.

The laser cane, tested only for safety by the Laser Laboratory, was developed under Veterans' Administration sponsorship by Bionic Instruments, Inc., of Bala Cynwyd, Pa. At present there are 10 canes in existence.

Currently, the laser cane is still under investigation. When it is perfected, it will help the blind to detect objects ahead of, above, and below their paths. A pulse of 3- to 10-watt infrared coherent light emitted from three lasers, located just below the curved handle of the cane, is reflected from obstacles and detected by three photodiodes situated 9 inches below the cane's transmitters. The photodiodes are behind receiving lenses which focus the returning light beams. A sensory stimulator which produces a poking sensation on the index finger of a right-handed user is located on the right side of the cane between the transmitters and the receiving optics. This signal

warns the user of hazards ahead. Easily distinguishable auditory tones warn of objects above and below. The cane may be rotated 90 degrees to gauge the width of obstacles ahead.

Goldman expressed the hope that, since its safety has been proved, performance programs to study this cane will be continued by sight instructors.

The University of Cincinnati Medical Center's Laser Laboratory, located in the Children's Hospital Research Foundation, has been active in numerous national and international laser safety endeavors. Safety courses and studies have been conducted for the Public Health Service, the Army, and the Air Force. Additional laser safety conferences are planned by the laboratory for 1971.

### **Contributed Papers on Medical Care for 1971 APHA Meeting**

Authors of papers for possible inclusion in the Medical Care Section Program of the next annual meeting of the American Public Health Association (October 11–15, 1971, in Minneapolis, Minn.) may obtain standard abstract forms from: D. Brian Heller, Senior Director of Special Studies, Research and Development, Blue Cross Association, 840 North Lake Shore Drive, Chicago, Ill. 60611.

Two types of papers will be considered: research reports and descriptions of programs or demonstrations. The deadline for submitting abstracts is April 15, 1971. Those whose papers are selected for the program will be notified in early June.

### **Grants to Support Centers for Research on Aging**

The National Institute of Child Health and Human Development (NICHD) will accept applications for grants to support centers for research on adult development and aging. Applications to be considered for fiscal year 1971 funding must be received by February 1, 1971. Thereafter, the deadlines will be June 1, October 1, and February 1.

Applicants should consult with the staff of NICHD before submitting any proposal. Further information concerning applications for these grants is available from the Adult Development and Aging Branch, NICHD, NIH, Bethesda, Md. 20014.

### **Appointments**

**Dr. Faye G. Abdellah** has been named chief nurse officer of the Public Health Service, with the rank of Assistant Surgeon General in the Public Health Service Commissioned Corps. She succeeds Miss Margaret McLaughlin who retired.

Dr. Abdellah is key adviser to the Surgeon General on policy and programs related to nursing. She also has been newly appointed associate director for Health Services Development in the National Center for Health Services Research and Development, Health Services and Mental Health Administration.

Dr. Abdellah, a native of New York City, has been with the Service since 1949. She was graduated from the Fitkin Memorial Hospital School of Nursing in Neptune, N.J., in 1942. She later attended Rutgers University, and she received B.S.,

M.A., and Ed.D. degrees from Columbia University, New York City.

Before coming into the Government, Dr. Abdellah held staff and supervisory positions at Columbia-Presbyterian Medical Center, New York City, and was on the faculty of Yale University School of Nursing, New Haven, Conn.

Dr. Abdellah is well known nationally and internationally for her work in research and health services development, including the progressive patient care concept. She has written several books and many articles on nursing and health services research. She received an honorary LL.D. degree from Case Western Reserve University; the Award for Distinguished Achievement in Research and Scholarship from Teachers College, Columbia University; the Federal Nursing Service Award; and the Army Nurse Corps Award for Nursing Research.

Dr. Abdellah defined, among others, the following priority areas for the future of nursing:

1. Communication of nursing research findings into practice to achieve a more effective delivery system of health services.

2. Continuing education to maximize the full potential of all nurses in the Service. (Training is needed for nurses in all specialty areas — neurology, cardiology, family health practice, and mental health, and nurses must be prepared to function in all health delivery systems, such as hospitals, ambulatory care centers, neighborhood health centers, regional medical programs, and health services research centers.)

3. Demonstration projects in which nurses are used effec-

tively in the delivery of medical and nursing care.

**Jessie M. Scott**, director of the Division of Nursing, Bureau of Health Manpower Education, National Institutes of Health, has been promoted to Assistant Surgeon General. This is the first time in the history of the Public Health Service that Flag Rank has been given to the director of this division, which serves as the focal point for nursing in the Federal Government.

Over the past 6 years Miss Scott has designed and operated programs administered by the Division of Nursing for the support of nursing education and for the delivery of safe, effective nursing care. Among her responsibilities is the administration of grants to students and schools of nursing as authorized by the Nurse Training Act of 1964 and the Health Manpower Act of 1968.

Miss Scott entered the Service in 1955 as a nurse consultant in the Division of Nursing and served as its deputy chief for 6 years before assuming her present position. During her tenure she assisted the Service with an exploratory project that led to the first federally supported experimental study of progressive patient care.

In 1960 Miss Scott was assigned to India to help nursing leaders in that country improve the utilization of nurses and survey their nursing resources and requirements. In 1961, she was the only nurse on a Public Health Service-American Hospital Association team that made an onsite study of care for the chronically ill in England and Scotland. In 1964, she was the only nurse on a PHS team

that helped the country of Liberia with a project to develop a national medical center.

Prior to her appointment with the Public Health Service, Miss Scott was assistant executive secretary of the Pennsylvania Nurses' Association, where she developed for the University of Pennsylvania the only program for field training in counseling. She has held the position of educational director of Mt. Sinai Hospital in Philadelphia. She has taught at Jefferson Medical College Hospital in Philadelphia, St. Luke's Hospital in New York City, and at the University of Pennsylvania.

Miss Scott was born in Wilkes-Barre, Pa., and received her nursing diploma from the Wilkes-Barre General Hospital School of Nursing, a B.S. degree in education at the University of Pennsylvania, and a master's degree in personnel administration from Teachers College, Columbia University.

**Dr. Robert J. Laur** has been appointed associate administrator, Health Services and Mental Health Administration.

He was former coordinator of professional education at the University of Missouri and assistant professor of community health and medical practice in the university's school of medicine.

As the new associate administrator, Dr. Laur will serve in a variety of management and policymaking capacities. His major area of concern will be that of making the Administration's 11 health service programs and its 24,000 employees more responsive to community needs.

Among the programs of the Health Services and Mental

Health Administration are the National Institute of Mental Health, the Center for Disease Control, the Regional Medical Programs Service, and the Community Health Service.

Prior to his 3-year association with the University of Missouri, Dr. Laur was an instructor in hospital administration at the University of Minnesota and, before that, an administrative resident at the Fairview Hospital, Minneapolis, Minn.

He received a bachelor of business administration degree in 1958, a master of hospital administration degree in 1960, and a Ph.D. degree in 1969—all from the University of Minnesota.

**Dr. John C. Greene**, director of the Division of Dental Health, has been appointed Assistant Surgeon General.

Dr. Greene was deputy director of the division from 1966. He is widely known in the dental profession as co-author and developer of the Oral Hygiene Index and the Simplified Oral Hygiene Index, used by dental researchers for evaluating oral cleanliness in dental health studies. He has also done extensive research on the epidemiology of periodontal disease.

Dr. Greene will administer programs to increase the supply of dentists, to improve their efficiency through use of auxiliary personnel and other methods, and to develop alternatives to minimize the need for dental manpower.

A career officer in the Public Health Service for 18 years, Dr. Greene has been special consultant to the World Health Organization in India and has participated in a number of other international research activ-



ities. He is an alumnus of the Communicable Disease Center's Epidemic Intelligence Service. He has served on the epidemiology staff of the National Institute of Dental Research and as assistant to the Chief Dental Officer, PHS. In 1961, he became chief of the Division of Dental Health's Epidemiology Program at the Dental Health Center in San Francisco.

Dr. Greene took his D.M.D. degree at the University of Louisville School of Dentistry, and his M.P.H. degree at the University of California. He is a member of the American Dental Association, the International Association of Dental Research, American Academy of Periodontology, and a Fellow of the American Public Health Association. He is also a diplomate of the American Board of Dental Public Health.

**Dr. J. Robert Graham** has been appointed assistant administrator for agency goals, Health Services and Mental Health Administration.

He will coordinate HSMHA's continuing evaluation of the goals set for improving health services. He will analyze trends and developments in this area and develop long-term projections for HSMHA activities.

Dr. Graham is a 1970 graduate of the University of Kansas Medical School. While a medical student, he was closely associated with the Student American Medical Association, serving as chairman of the SAMA Joint Commission on Medical Education, associate chairman of the National Committee on Medical Education, national coordinator of the Regional Conference for Change in Medical

Education, and member of the Board of Trustees, Institute for the Study of Health and Society.

**Dr. Warren V. Huber** has been named associate director for Collaborative and Field Research, National Institute of Neurological Diseases and Stroke, National Institutes of Health.

Dr. Huber has worked closely with NIH during the past 10 years while he was coordinating the Veterans' Administration nationwide neurology program. In this capacity he served on the NINDS National Advisory Council.

Dr. Huber's professional experience ranges broadly from practicing clinical neurology to managing neurological units in two large VA hospitals and supervising neurological and psychiatric units in U.S. military hospitals during World War II and the Korean War. In addition, he has taught neurology, managed electroencephalographic laboratories, and helped to develop research projects in multiple sclerosis, cerebrovascular disease, mental retardation, and epilepsy.

In his new position, which requires an understanding of the manifold problems in neurology, psychology, pathology, and clinical neurology, Dr. Huber will supervise NINDS contracts and grants allocated to field and collaborative research.

Dr. Huber's interests will encompass three major areas: collaborative perinatal research, correlating factors in pregnancy and early life causing cerebral palsy, mental retardation, and other neurological and sensory disorders; epidemiologic research, investigating social,

geographic, and genetic factors in neurological diseases; and special projects, including collaborative studies on epilepsy and head injury.

Dr. Huber completed his pre-medical training at Columbia University and received his M.D. from the Long Island College of Medicine in 1933. After training as an intern at Brooklyn Hospital and a psychiatric intern at Creedmoor State Hospital, he served his residency at the Neurological Institute in New York and then entered private practice.

During World War II, Dr. Huber was chief of neurology and psychiatry in U.S. Army hospitals in Ireland, England, and France. Subsequently, he was chief of neurology at Brooke Army Hospital, San Antonio, Tex., from 1950-53.

From 1953-58 he was chief of neurology in VA hospitals in Richmond, Va., and Denver, Colo. In 1958 he was director of research for the Lynchburg (Va.) Training School and Hospital Colony, and then returned to the VA hospital in Denver until he came to the Veterans' Administration central office in 1960.

