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125 STATE HEALTH OFFICERS VISIT NIH

MR. EWING OUTLINES JOINT DEFENSE ROLE OF HEALTH AGENCIES

Federal Security Administrator Oscar R. Ewing pledged PHS support in the civil defense work of State health agencies and discussed various aspects of a proposed joint program. The occasion of his talk, "Health and Welfare Priorities in National Defense," was the 49th Annual Conference of State and Territorial Health Officers, who visited NIH on October 24 and 25.

At a luncheon meeting on October 24, Mr. Ewing expressed the main purpose of the Scientific Sessions at NIH—to give the health officers information for use in defense activities.

He emphasized the need for sacrifices in developing civil defense programs despite limited resources. "We in the Federal Security Agency," he added, "will give you every support we can in whatever plans you may evolve." He promised that PHS would make every effort to develop mass techniques for effecting health measures with a minimum of funds and personnel.

Unsound curtailment of funds must be opposed. He advocated Federal aid to develop local health departments; to increase support of preventive services and rehabilitation; and to provide leadership in organizing civil defense programs.

In discussing labor conservation in such programs, Mr. Ewing proposed a more effective use of citizen groups. State health officers, he said, can help these groups develop local services.

HOLD 49th ANNUAL MEETING WITH PHS

Scientific sessions of the 49th Annual Conference of the State and Territorial Health Officers Association were held at NIH October 24-25. Also present were mental health and hospital construction authorities of various States.

Following the call to order by Dr. Wilton Halverson, president of the Association, Dr. W. H. Sebrell, Jr., NIH Director, presented the "History and Present Organization of NIH," and Dr. Norman Topping, Associate Director, discussed current trends in NIH research. Institute Directors and others gave further information on the NIH research program.

At a luncheon meeting at the Officers Club, Naval Medical Center, Oscar R. Ewing, Federal Security Administrator, spoke on public health measures for national defense. Surgeon General Leonard A. Scheele presided. Mr. Ewing pointed out that this conference is particularly important, since State health officers are best prepared to evaluate the PHS program in light of national health needs.

Major interests of the health officers, as reflected by questionnaires, were considered in planning the Scientific Sessions. These were so arranged that each delegate could attend 4 of 22 panels.

In addition, Dr. Jack Masur, Director of the Clinical Center, discussed plans for the new hospital; Ernest Allen, Assistant Chief, RGF, explained the research grants and fellowships program; and a seminar on ACTH and cortisone was held, with Dr. Norman Topping as moderator.
The Chemical Pharmacology Section, NIH, is conducting investigations to determine how the body metabolizes, or "handles," chemical compounds—absorbs, alters, distributes, excretes them. Results have been the development of therapeutic agents for use in cardiovascular disease.

As an approach to this study of the metabolic fate of drugs, Dr. B. B. Brodie, Chief of the Section, and his associates Dr. Sidney Udenfriend, Elwood Titus, and Julius Axelrod are developing methods for the measurement of drugs and their derivatives in biological material, such as body fluids and tissues.

Three principles are borne in mind: (1) chemical changes in a drug within the body may limit the therapeutic effect; (2) they may result in toxic substances; and (3) a drug as administered may be inert, but its metabolic products active. In any event, a knowledge of the chemical structure of the drug and its products may suggest a modified or new drug of increased efficacy.

One significant result is the finding that both acetyl salicylate and phenacetin, two analgesics, are metabolized largely to acetyl p-aminophenol, and that this product is mainly responsible for the analgesic action. Further, the toxicity of the parent drugs is due to the formation of small amounts of aniline or a derivative. The study has shown that acetyl p-aminophenol may replace the parent drugs as a nontoxic agent to relieve pain.

The analgesic pyramidon was shown to be partly transformed in the body to 4-aminoantipyrine; a compound of higher pain-relieving potency (at least in rats) than any other non-narcotic analgesic.

The anti-coagulant dicumarol and related substances have been studied. Metabolic factors underlying their capricious effects on the blood-clotting mechanism have been clarified—a forward step in the rational use of anti-coagulants in cardiovascular disease.

Procaine, used to control heart irregularities during anesthesia, is limited by its toxic properties and instability in the body. The Section has synthesized a derivative, procaine amide, which retains the therapeutic properties of the parent drug but not its disadvantages. The new drug is effective against ventricular tachycardia, or "runaway heart," which may occur in myocardial infarction, death of a part of the heart muscle.

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Meetings

Two National Advisory Councils, established recently to advise the Surgeon General on research grant applications and matters of policy, will meet this month for the first time, Building T-6, Room 1057. The National Advisory Arthritis and Metabolic Diseases Council will meet November 15 at 10 a.m., and the National Advisory Neurological Diseases and Blindness Council, the following day at the same hour.

Dr. Clifford Grobstein, NCI, will speak at Top Cottage, November 17, at 3:30 p.m. Subject: "Explanation and Intra-Ocular Implantation of the Mouse Embryonic Shield." Everyone invited.

Honors

Dr. Jack Masur, Director of the Clinical Center, was recently appointed chairman of the Council on Hospital Planning and Plant Operation of the American Hospital Association.

Dr. J. M. Hundley of the Laboratory of Biochemistry and Nutrition, EBMI, has been appointed Nutrition Consultant to the Office of Health Resources, National Security Resources Board. He will participate in planning to provide proper nutrition of civilian and military groups in the event of enemy attack.

Apparatus Exhibit

A demonstration of the latest laboratory apparatus from the Arthur H. Thomas Co., Philadelphia, has been arranged by the Purchase and Supply Branch, NIH. The apparatus will be shown in Wilson Hall, November 15, from 9 a.m. to 4 p.m.

Cancer Surveys

The first in a series of technical monographs, "A Methodology for Environmental and Occupational Cancer Surveys," by Dr. W. C. Hueper, NCI, is now available. Get your copy from the Cancer Reports Section, ext. 2041.
DRS. CHOSEN SECOND FOR MENTAL HEALTH AID

Where do people with mental or emotional difficulties go for help? At a scientific session of the State and Territorial Health Officers conference at NIH, new light was thrown on this question by Dr. John A. Clausen, social scientist in the Professional Services Branch, NIMH. His report was based on a public opinion poll made recently in Phoenix, Ariz., by NIMH and the University of Michigan.

"It is not enough to establish community services," said Dr. Clausen. "Even when badly needed, they may not be used."

The survey indicated that only one-third of those polled would be willing to visit a psychiatrist if suffering a serious psychiatric disorder. Those seeking advice on marital, child-behavior, and other problems are more likely to consult clergymen than physicians or psychiatrists. Five hundred adults were interviewed.

Part of a broader program, the survey was designed to determine what people know and do about mental health problems.

DURATION IMPORTANT IN PENICILLIN TREATMENT

In treatment with penicillin, physicians should try to minimize penicillin-free periods in which bacteria might recover and multiply, advised Dr. Harry Eagle, Chief of the Section on Experimental Therapeutics, Laboratory of Infectious Diseases, MI. Dr. Eagle's studies leading to this conclusion were discussed at NIH by State and Territorial Health Officers in a panel on antibiotics, October 24.

After penicillin treatment, there is a varying period in which the damaged organisms of infection fail to multiply and are killed by the body's defenses. Most organisms, however, recover from the drug and resume multiplication. Accordingly, a dosage schedule with long penicillin-free periods is likely to be slower in effecting cure than a schedule providing continuous levels of the drug.

NIH SEMINAR ON ACTH AND CORTISONE

State and Territorial Health Officers visiting NIH attended a seminar on the new endocrine products that have shown promise in clinical trials against arthritis and other diseases. The six authorities who led discussions and their respective subjects are as follows (left to right): Dr. Ernest Allen, RGIF, 'Grants Program'; Dr. Erich Rosettig, EBMI, 'Plant and Other Sources'; Dr. Norman Topping, Associate Director of NIH (moderator); Dr. Evelyn Anderson, EBMI, 'Animal Experimentation'; Dr. E. E. Nelson, Food and Drug Administration, 'Control and Distribution'; and Dr. Luther Terry, NIH, 'Clinical Aspects.'

HOSPITAL PLANNING FOR CATASTROPHE DISCUSSED

What civilian hospitals should do in case of catastrophe in peace or war was discussed at NIH by a panel of PHS experts on October 24, at the annual meeting of State and Territorial Health Officers.

The panel included Dr. John Cronin, Chief, Division of Hospital Facilities, Dr. John McGibony, Chief, Division of Medical and Hospital Resources, and Dr. Jack Masur, Director of the Clinical Center.

Civilian casualties in wartime, it was emphasized, may be expected to occur in large numbers, but would not differ essentially from peacetime casualties in types of injury. Also discussed were the problems of providing space for patients, finding people to take care of them, training of voluntary workers, and preparation for emergency supplies.

Planning alone, the panel emphasized, would not be sufficient. Like a good fire-fighting system, catastrophe procedures must be practiced repeatedly with an actual organization.

HOSPITALS MUST ISOLATE RADIATION PATIENTS

The usual hospital techniques of protection against X ray must be modified and extended in the handling of radioisotopes, Dr. Clinton C. Powell of the Laboratory of Physical Biology, EBMI, told the State and Territorial Health Officers.

When feasible in planning for new construction, general hospitals should build special radiation wings for the isolation of patients under treatment with radioactive isotopes. Such a wing will be provided in the Clinical Center.

The isolation of radiation patients in the Clinical Center will be complete. The ordinary hospital articles they use, such as dishes, clothing, sheets, and instruments, will be kept separate from such items issued centrally. General hospitals, Dr. Powell stated, can follow these procedures now.
Animal studies in medical science have unquestionably increased the life-span of man. NIH, as one of the largest medical research centers in the world, maintains thousands of animals for study purposes. Meeting this need at NIH is the responsibility of Samuel M. Polley and Dr. George E. Jay of the Animal Section, Laboratory Aids Branch.

Building T-10 is the home of most of the smaller animals, and special inbred strains of mice, rats, and guinea pigs used principally for cancer research will soon be housed in Building 12. Horses, sheep, and some guinea pigs and rabbits are kept on a farm near Rockville, Md.

Buildings T-10 and 12 house four strains of rats, ten of mice, four of rabbits, and six species of wild mice and three of wild rats. In addition, there are prairie dogs, shrews, voles, meriones, minks, and hamsters.

The means of procuring animals for a research problem is quite simple. A special requisition is sent to the Animal Section, Room 120, Building T-10, giving a full designation of the animals required. The request should be submitted 24 hours in advance, but allowances are made in emergencies. Only requests by NIH scientists engaged in research are honored.

NIH purchases guinea pigs and large animals when needed, and the rest are produced by the Animal Section. This was found to be the only practical arrangement, in view of the great number of animals used, the need for immediate delivery, demand for pure strains, exact knowledge required for maintenance, need for immature animals that cannot be safely shipped, and, most important, the fact that most of the strains used are unobtainable on the open market.

Not only does the Animal Section serve scientists at NIH. Animals are shipped to PHS field stations and to other institutions, so that new colonies may be started for comparative studies. Such colonies have been established in several laboratories in the United States and in Switzerland, Guam, Liberia, and other lands.

NIH WORKERS SWAP JOBS TO BROADEN EXPERIENCE

An intramural training program involving rotation of several administrative employees was recently instituted at NIH. Long found a successful method in industry, the exchange of duties among NIH personnel is expected to result in closer teamwork, additional skills, and better understanding of the total program.

The changes to date involve five persons. J. H. McLoughlin, Financial Management Branch, OD, has exchanged duties with J. F. Monahan, NCI. G. A. Van Staden of MI has gone to RGF; his regular duties have been assumed by Zelda Schiffman of the Management Analysis Section, OD. And T. K. Wintersteen of NIH has taken Miss Schiffman's place.

The transfers will be in effect for no longer than four months. If the program proves effective, similar changes may be made in the future. These, however, would be few and gradual, designed to enhance rather than disrupt operations.

MANY PARTICIPATE IN HAMSTER TRYOUTS

Try-outs for a new Hamster show, tentatively scheduled for early December, were held in Wilson Hall at noon, October 31. Many a budding artist attended.

The second annual production is entitled "Carmen Cold--A Hoarse Opera." The skits were riotous, even on first reading.

In addition to talent, the following are needed (see Jack Beecher, Room 137, Building 1): grass skirts, a silver coffee service, binoculars, a football helmet and shoulder pads, a galvanized wash-tub, a portable ironing board, an iron, red flannel underwear, and a hammock.

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Of the Hamster show, Jack Beecher says, "It gives the people a chance to play and laugh together. That's important from a management standpoint. They become better acquainted and consequently work better together."