

SCIENCE NEWS

Science Service, Washington, D. C.

THE AMERICAN HEALTH CONGRESS

TELEGRAPHIC REPORTS BY WATSON DAVIS

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To the health of 110,000,000 people the sessions of the first American Health Congress, opening at Atlantic City, were devoted and dedicated by the sixteen national participating organizations of doctors, nurses, psychiatrists, scientists and laymen.

A revolution in public health was proposed in the opening address of Dr. Lee K. Frankel, of New York, chairman of the National Health Council, when he urged that out of cooperation of the many associations promoting national health there should come a national body militant for the bodily and mental well-being of every inhabitant of the country.

Just as health and charity organizations have combined more effectively to conduct their work and raise necessary funds, so the national united organization would unify and make more effective and economical a concerted unified attack on all diseases. Reorganize the individual so that he is a health unit instead of a potential sufferer from any particular disease, Dr. Frankel urged in saying that the national association would allow the health worker to visualize the eradication of heart disease, tuberculosis, cancer, venereal disease, child mortality and insanity not as separate entities but as maladjustments of the human organism which require unified and concerted effort for their eradication.

In this national health association some see the first step toward making real the health workers' dream of a united federal department of health.

The rescue of children and babies from preventable death now so successful that only one dies where two died a generation ago, was declared by Sir Arthur Newsholme, leading British health authority and official, to be a more urgent subject for public health work than even the prevention of cancer. Nearly a quarter of all deaths of human beings occur before they are six years old, he pointed out, whereas cancer kills the majority of its victims when they have paid back their economic debt to the community, generally with a balance of work for the community to their credit. But, he continued, if out of the cancer researches now in progress there comes a practical prophylaxis, then the prevention of cancer will rank with child hygiene, tuberculosis control and venereal disease prevention as one of the four most important branches of health work.

The public health workers, like the physicians in the field of individual health, carry and apply to the general public the findings of science. In the sessions of the week, little children who won't mind their parents, eyes that can not see, minds that do not function, bodies that are ill, were discussed. And as a result thousands will be made better and happier.

Specifications for the normal, natural child of America were demanded by Herbert Hoover, war-time foster father to 15,000,000 European waifs and now president

of the American Child Health Association as well as secretary of commerce.

"Parents would like to know what the normal is in children," he told the American Health Congress. "If we only knew it would give a new orientation to all child health endeavors and would transform our thinking from deficiencies to positive terms of an ideal."

This normal child, which Mr. Hoover believes should be defined, is neither the perfect nor the average child. Mrs. Jones's Mary and Mrs. Smith's John will be able to achieve this normality, yet the normal child would be superior to the average child of to-day.

Draft figures which showed that 80 per cent. of America's men were below normal physically contrasted with the fact that 80 per cent. of all babies born in America are born perfect has shocked the illusions of those who had believed that our country of fine climate, abundant food, little poverty and great devotion to children could not help but produce a fit population. With all these advantages enjoyed by ten million American children of pre-school age, yet malnutrition exists in 20 to 25 per cent., postural defects occur in 40 to 50 per cent. and 60 to 70 per cent. have caries.

"Our work is racial defense," Mr. Hoover said. "If we want this civilization to march forward toward higher economic standards, to moral and spiritual ideals, it will march only on the feet of healthy children. The breeding ground of the gangster is the over-crowded tenement and subnormal childhood. The antidotes are light and air, food and organized play. The community nurse and the community safeguard to health will succeed far better than a thousand policemen."

Whether indignation at the prohibition law has caused a popular revolt against restrictions for the common good and thus affected public health measures was a question raised by Wm. J. Schieffelin, of New York City, who spoke on public health from the viewpoint of a layman. He cited the 43,000 cases of smallpox in the United States last year as a serious indictment against the public since every one of the cases was preventable. He urged health endeavor to avoid fads such as anti-tobacco propaganda since most people will discount all the rest if they are told what their experience has taught them is untrue.

One of the great farm crops of this country is children, R. W. Dunlap, assistant secretary of agriculture, told the health workers in announcing that the federal government department of agriculture is turning part of its efforts toward making the farm a better home for human beings.

"Farms are growing, training, educating and turning over to the cities at working age from 300,000 to 400,000 young folks each year," Mr. Dunlap said. "The farms of the middle west are literally the breeding grounds of the nation. Our greatest wealth is in the children of the next generation. The blood and education with which they are equipped determines in the long run whether our civilization is going up or down."

An intelligence test on health for the educated person was devised and given to the congress by Dr. Livingston Farrand, president of Cornell University. It takes the form of a modern decalogue on health, which, condensed, is as follows:

(1) Know physiological basis for sound health habits, such as sleep, posture, exercise and proper elimination; (2) know types, amounts and proportions of food essential to proper nutrition; (3) know principles of normal mental action and conditions underlying common variations from normal states of mind; (4) understand sex instinct; (5) know factors determining infection and resistance and principles of artificial immunization against infectious diseases; (6) know causes and prevention of degenerative diseases sufficiently to offer the prospect of passing through middle life without a breakdown; (7) know and be armed against environmental hazards, such as polluted water and milk, housing congestion, poisons in industry, etc.; (8) appreciate the necessity of frequent medical and dental examinations; (9) choose wisely medical and dental advisers and realize that the modern practice of medicine is grounded on science, not on mystery, fancy and tradition; (10) know important health problems facing the community and methods of attack.

Three of the principal disease menaces of childhood, measles, scarlet fever and diphtheria, have now succumbed to potential control by man through the application of recent medical advances.

There is now little excuse for a child to fall ill with diphtheria. The doctor and the public health worker have sure-fire weapons to be used against this disease, both before the illness begins and afterwards. Thousands of school children in the last few years have been given harmless injections of diphtheria toxin-antitoxin, and Dr. William H. Park, New York City health official, announced to the congress that in New York the deaths have been cut down to one third and the cases to one half of what they were in 1919. Before the development of the toxin-antitoxin combination that makes children immune until they have outgrown the greatest diphtheria danger ages, antitoxin administered at the first sign of the disease cut down deaths to one fifth.

"The end of diphtheria would come about if physicians should immunize children when they reach nine months of age so as to protect them at the most susceptible period of their lives," Dr. Park said.

Since diphtheria is essentially a disease of the cities, Dr. Matthias Nicoll, New York State health commissioner, explained how the state's campaign for "No diphtheria by 1930" was being waged principally in the centers of population.

Following the same path blazed by diphtheria prevention, there is now being applied a test, cure and preventive of scarlet fever. Drs. Dick and Dick, husband and wife on the staff of the Leander McCormick Institute for Infectious Diseases, Chicago, three years ago discovered the germ causing scarlet fever, and devised toxin and serum for detecting, preventing and treating the disease. As yet the work of the Dicks has not been sufficiently used in actual cases on a large scale to allow it to

become a part of the general defenses of the public, but Dr. John A. Kolmer, of the University of Pennsylvania, told the health workers that the prospects of conquering scarlet fever in the same way that diphtheria is being overcome are splendid.

Measles has long been considered one of the minor ills of youth, but it is now realized that although uncomplicated cases are not particularly dangerous, the after effects of pneumonia, ear trouble and laryngitis make it one of the major hazards of childhood. The success reported by Dr. Rowland G. Freeman, of New York City, in the use of blood from persons recovering from measles in protecting others against the disease has created interest among the experts. The blood of the convalescents has been found to protect 50 to 85 per cent. of those treated, whereas all but 2 to 4 per cent. of those unprotected by either serum or previous disease contract it after exposure. At present the serum, limited in quantity because of the fact that no animal can be made to contract the disease, is being used only to protect infants and sickly children who would not live through the measles.

Sanitation is causing typhoid fever to vanish rapidly; through vaccination, Jenner be praised, smallpox is now a disgrace rather than a misfortune and only the carelessness and gullibility of the public have prevented its elimination; plague, cholera and other curses of the ages are kept out of America by Uncle Sam's careful health cordon at our frontiers.

Even tuberculosis, the great white plague, does not kill the large percentages that it once did, for, while a vaccination has not been developed to combat it, three quarters of the incipient cases can be cured in the best sanatoria and campaigns for prevention have been successful. Calmette, heading the great Pasteur Institute at Paris, has at last given us a really scientific and valuable procedure for the artificial immunity against it that some believe will be valuable in protecting the cows of the country or even human beings under certain conditions.

Unhappily there is a small group of infectious diseases that man still must bow to. Influenza, pneumonia, other respiratory diseases, infantile paralysis and sleeping sickness are practically beyond human control.

Cancer, an increasing cause of death, is as yet not under control. X-ray and radium, as well as public enlightenment as to its dangers, have caused some hope, but Dr. Francis Carter Wood, of Columbia University, described the cancer situation as quite unsatisfactory especially since radium and X-rays do not produce a large percentage of cures. The heart has been always considered a vulnerable portion of the human body, but the fact that two per cent. of the population is diseased in this organ places heart trouble in the class of mankind's major afflictions.

Science, despite its conquests, still has work to do.

Man can not live by food alone. He must have light in order to grow healthily, strongly and happily. The kind of light that the eyes can see will not do; it must be invisible light shorter than that to which the eye is tuned and it constitutes less than one per cent. of the total rays of the sun.

This fraction of the output of the sun stands between health and possible illness for all of us, but children, growing and fighting against diseases to which adults have become hardened, need the protective radiance of this particular part of the solar spectrum. To the American Health Congress the latest knowledge of the part that ultra-violet light plays in health was reported by those carrying on the latest scientific experiments.

Within the last generation realization of the importance of light dawned upon health workers through the nearly miraculous cures that nakedness in the sunshine brought to sufferers from the serious sort of tuberculosis that invades bones and blood. Dr. William J. Bell, deputy health minister of Ontario, Canada, told how the eighty-nine of the first hundred soldier sufferers from surgical tuberculosis who were given the sunshine cure are now back at work.

At another convention along the Atlantic City boardwalk, the electric power and light engineers have listened to reports that show that the visible light of the electric lamp is also a health aid through preventing accidents in street and factory and preventing eye strain at night work and on dark days.

The electrical power house can pinch-hit for the sun in providing invisible light of therapeutic powers when this is necessary. Since in winter and at nearly all times except at midday in summer and especially when smoke, dust and moisture fill the air the sun's curative rays are few and feeble, the ultra-violet lamp is being used as a substitute for the sun.

One of the much-heralded vitamins, that preventing rickets, is produced when ultra-violet light falls on cholesterol or phytosterol, essentials of animal and plant life, and this bottling of sunshine makes scientists feel that they are closer to solving one of the problems of life.

The popular superstitions about the effects of moonlight, how fish and timbers rot more readily in moonlight than in dark, for example, may contain valuable hints to science, for some investigators find that polarized light vibrating in one plane only, as moonlight does, makes plants grow faster and starch change to sugar. In this there may be a disease antidote of the future. To Professor John W. M. Bunker, of the Massachusetts Institute of Technology, the shortest rays known to science just discovered by Millikan suggest a new tool that may be of use to future guardians of health.

Without the invention and discovery of new weapons against disease, the business of living could be made more successful simply by the application of what we know.

Dr. Sheppard W. Foster, of Atlanta, president of the American Dental Association, stated that in addition to protecting against various forms of indigestion, neuritis, malnutrition, rheumatism, mental trouble and other disturbances due to poor teeth, proper care of the teeth in childhood would be a profitable investment to schools because it reduces the number of those pupils who habitually repeat grades. He estimated the cost of teaching these curable repeaters at more than a million dollars annually.

America's great army of mental defectives, numbering about a million, can best be handled by the awakening of the social conscience to the scientific interpretation of

facts all of us know. Dr. Charles P. Emerson, president of the National Committee on Mental Hygiene, told the congress in evaluating the status of mental hygiene work. Employers, teachers and courts should recognize the limitations of the feeble-minded, he urged, and treat them as children of their mental age. No new laws are needed since those written years ago cover these cases. And the feeble-minded, placed under proper guardianship and prevented from adding to the population, will make good citizens within their capabilities.

Realization that microbes know no international boundaries and that one pest spot may infect the whole world is causing health experts to consider the whole world as a unit in inaugurating defensive or offensive health program.

The most effective international cooperation in the whole realm of relations between countries occurs in the field of health. Three great projects for international health are under way, each in its own field, and already many diseases have been chased to the frontiers of civilization into the areas still under the rule of the medicine man instead of the physician.

To-day an epidemic in one part of the world causes an immediate preparation in a distant country to which, in spite of its geographical remoteness, a fast liner may carry it as rapidly as the mails. Cable and radio beat the germ on its foreign foray. To-day the methods of disease control and prevention perfected in one country are quickly applied to another, for experts are given the opportunity to travel from one country to another and through seeing and personal contact absorb for the benefit of their fellow countrymen the latest weapons for health. To-day methods of arousing public conscience and interest that prove successful in one country are shared with all other nations of the world.

The world board of strategy and general staff for health is the health committee of the League of Nations that meets every six months at Geneva. Uncle Sam has not consented to sit at the political councils of the nations, but he has two representatives on this important board, Surgeon General Cumming, of the U. S. Public Health Service, and Dr. Alice Hamilton, professor at the Harvard School of Public Health, and an expert upon industrial conditions and diseases. Dr. Hamilton told the congress that at Geneva, a Pole, Englishman, German, American, Swiss and Italian are in active charge of the committee's work which includes interchange of health statistics, standardization of medical sera and drugs so that a doctor, no matter where he may be, may prescribe the proper quantity and quality of medicine, and many other activities.

"The committee is an international body in every sense of the word, uninfluenced by national politics and the prejudices left by the war," Dr. Hamilton said. "It is carrying on work which is not only intrinsically valuable but which should make for international goodwill and understanding."

An American organization, the International Health Board of the Rockefeller Foundation, has played a large part in the inauguration of international health cooperation through aiding governments to secure the best equipment and personnel for public health and promoting

health campaigns and research throughout the world. Dr. George E. Vincent, president of the Rockefeller Foundation, told the congress in addition to the progress of international congress, the leading nations of the world are giving increased attention to health administration and placing trained sanitarians in charge of the health of their peoples.

The Red Cross is the symbol of international health co-operation throughout the world, and Dr. René Sand, secretary general of the League of Red Cross Societies, told the congress how, under its banner, the propaganda for health has been made world-wide. School children of thirty-seven nations are taught to care for their own health and that of others by the Junior Red Cross. While primary health activities are left to the official agencies, the creation in the masses of men, women and children of a desire for a healthier and loftier standard of life is a function of the Red Cross.

Remarkable and promising as medical and health advance has been in the past fifty years, all stages of belief, sanitation and health practices exhibited in the course of this country's history can be found existing in the world to-day, Dr. William F. Snow, director general of the American Social Hygiene Association, pointed out. And he issued this warning: "It is not unreasonable to predict that the next 150 years may see us return to an age of pestilence and short life span unless we effectively teach each generation fully to understand and to apply the scientific bases for our knowledge of health conservation."

In the same vein, Dr. Vincent said: "He would be hopeful indeed who should at the present time see anything like a millennium of human brotherhood; but at any rate it is obvious that the tendencies now to be seen in the world toward cooperation for health can not fail to draw scientific men everywhere into closer comradeship. So much is clear gain. There is reason to hope that for a time at least the resources of science will be turned from the destruction of human life to the healing of nations."

Dad and mother are largely to blame. The responsibility for the "flaming youth" era of to-day rests in a large measure upon the parents in the opinion of the mental hygiene experts who have spoken this week at the American Health Congress.

The mental experts who have studied the matter of normal mental development see in the wide-spread youthful rebellion of to-day, manifested by frankness, bobbed hair and protest against parental control, evidences of normality rather than abnormality.

"The two most important aims in the education of boys and girls should be the gradual emancipation from parental control and the achievement of a healthy heterosexuality," Dr. Frankwood E. Williams, medical director of the National Committee for Mental Hygiene, declared. "Reckless behavior, while undesirable in itself, is not, in many cases, necessarily a sign of moral depravity but of a healthy tendency toward normal adulthood. Some of the wild things the adolescent may do may themselves be wrong, but they are the symptoms of the emergence of a very desirable factor in the developmental period of life."

During the mauve decade of the 1890's the interest

seemed to be in making people good, particularly pure, Dr. Williams pointed out. The world seemed to be convinced of the depravity of all human nature and to lack confidence completely in the fine possibilities of a human being if he could be given a chance to grow and develop. Dr. Williams said that to-day it is recognized that our parents and grandparents got the cart before the horse and that now the thing to do is to see that people are physically and mentally well. If this is done, the rest will take care of itself.

The cradle is the proper place to start training a child. Personality and viewpoint of the world is developed in the first two or three years of life rather than at a later age when failure at proper training may become apparent. In this work the parents have great responsibility, which they are not always ready to assume.

"The home as such has lost to a very great extent its great stabilizing force in the development of the personality of the child," Dr. Douglas A. Thom, of the Massachusetts State Department of Mental Diseases, said. "Nurse maids, governesses, paid companions have taken the place of parents. Nursery schools, kindergarten, boarding schools, camps have taken the place of the home. The child has been farmed out for its moral, spiritual and intellectual training in pretty much the same way as the family washing."

Training for parents to fit them for the job of bringing up their children was suggested by Dr. Christine M. Leonard, of the All-Philadelphia Child Guidance Clinic. She urged that parents should realize that they may consciously or unconsciously mold the child's future by their own emotions and desires and that this may be harmful to the child. Children are human beings, after all, and they have thoughts and feelings of their own which should not be subservient to the self-satisfaction of the parents.

The experts vindicated the child who is always curious. Curiosity is the heritage and possession of all children with the possible exception of the idiot and no matter how excessive the curiosity it can hardly be considered pathological. According to Dr. Edward A. Strecker, of the Jefferson Medical College, Philadelphia, the general assumption that sex curiosity is abnormal is erroneous.

"Usually children are more curious about sex than about other matters simply because sex has been attractively clothed in mystery," Dr. Strecker said. "One does not face the question as to whether sex curiosity is to be satisfied or not. The real question is will it be satisfied in a natural constructive manner or is the child to be left to tap over available and harmful sources of information."

Some of the qualities of mentally sound children were given by Dr. Strecker. There should be included in their make-up the ability and the desire to move, a certain readiness and willingness to imitate, some response to suggestion, a strong leaven of curiosity, an appreciable love of power, a dash of savagery and a seasoning of romancing. There should be intelligence enough to bring out these traits; enough emotional virility to impress the lessons which they teach and moral judgment to act as a kind of partial check. The marked diminution of these characteristics is a much safer measure of a sick mind than is their excess.