REVIEW OF REVIEWS

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DEFENSE OF THE SHEPPARD-TOWNER ACT

The Sheppard-Towner Act, which provides for federal aid to promote maternal and infant-welfare work in the states of the Union, has been rudely attacked, mainly on the principle that federal subsidies to the state are unsound and harmful, in the end, to the best interests of the individual states. Recently, an editorial in the *Journal of the American Medical Association* called upon all physicians to be ready to use their influence against the proposed extension of the life of this law, at the expiration of the five-year period of trial. The law was originally drafted to be in effect only until June 30, 1927. However, the State of New Mexico, which has received the benefits of the Sheppard-Towner Act in its campaign against maternal and infant mortality, seems to be strong in favor of it.

The following is taken from the *Weekly Bulletin of the Bureau of Public Health of New Mexico,* for July 27, 1926:

"Aside from general objection to all federal aid and what it implies, allegations against the Sheppard-Towner Act have chiefly been that it has accomplished no good. It is worth while, then, to examine this assertion, so far as New Mexico is concerned, in the light of our annual report to Washington on operations financed with this subsidy and corresponding local funds. This report covers the fiscal year July 1, 1925, to June 30, 1926, for which we received federal funds amounting to $12,430. Items are selected to show how our people have profited directly by expenditure of the money and how it has actually hastened development of this special phase of health work in the State.

"Group conferences or 'clinics' for babies and for expectant mothers totaled 210, at which 3,636 persons were registered. They were examined, advised by physicians and nurses, harmful habits pointed out and arrangements made for correction of defects. As a direct result, it is known that at least 1,058 children had defects corrected early enough in life to overcome their deleterious effects.

"Classes for school girls, teaching infant care and home nursing, numbered 34, in which 656 girls completed the course. If any of our school work has lasting value, then this would seem to be as much worth as arithmetic or spelling. Such classes were made possible through federal aid.

"In all, 82 midwives finished a practical course of training. They learned modern antiseptic methods, learned the danger signals that call for medical aid, and provided themselves with clean equipment, with antiseptic solutions and with simple dressings for their patients. They learned above all *not to meddle with nature.* A few recent inspections show that they are following instructions.

"Nurses supported wholly or in part with federal funds made 6,851 home visits to mothers and babies. These were largely for the purpose of showing mothers how to carry out the doctors' orders, how to prepare feedings, how to care for sick children, how to bathe and dress them most easily, and how to keep themselves in health when another baby was expected.

"The parents of the 9,700 babies whose birth certificates reached our office each received a pamphlet on the care and feeding of babies. Every day, we receive letters from those parents thanking us for this service and asking further advice.

"Not counting distribution of literature, 14 counties were given directly some kind of service for the 'hygiene of maternity and infancy.' During the four years of federal aid, 21 of the 31 counties have been so reached. This means that 13 counties having no nurse nor full-time health officer have had a small share in this kind of service. Eight more will be visited during the current year. They would have had nothing of the sort, if federal aid had not been provided. Even in those counties employing nurses of their own we find greatly stimulated activity in maternal and infant hygiene.

"Some day, when we receive enough appropriation from the State to pay a competent statistician, we ought to be able to show tangible results in the reduction of deaths among mothers and babies. But a large part of the results can never be tabulated. When a baby has a defect corrected, we cannot say just how much later disability has been prevented. All we can base an estimate upon is the record of the Army Draft, in which one-third of our young men were found unfit to fight and that at least half of this number could have been made fit by proper attention in childhood. When an expectant mother is given advice as to hygienic living, we can never know whether or not she would have come through her trial safely without it. We do know that in other states, where records are available, expectant mothers who receive medical attention and advice have less illness before and during childbirth than those who receive no such help. When a little girl is taught how to give proper care to a baby sister or brother, we can never know the ultimate effect of that training as she comes to care for her own babies. We do know that she has received impressions at a time when she is most receptive and when they sink in the deepest.

"But five years is all too short a time in which to produce a profound and lasting effect upon an entire population. A little has been done, but the road ahead is still long and difficult. Education for a generation will show results; nothing short of that will do so. To criticize the Sheppard-Towner Act on the score of no accomplishments, at the end of four years, is to demonstrate an abysmal ignorance of the way in which social changes are brought about."

SPECIAL TUBERCULOSIS NURSES IN WEST VIRGINIA

The following news item is taken from the *Bulletin of the National Tuberculosis Association* for August 1926:

"The West Virginia Tuberculosis Association has recently adopted an interesting procedure in the training of nurses in tubreculosis. Arrangements have been made with the State Board of Control whereby nurses in training in general hospitals throughout the state will be given an opportunity to take part of their

training at the state sanatorium. The sanatorium will pay $30 a month and transportation to and from the institution and will take up a maximum of 100 students a year. The West Virginia Tuberculosis Association is coöperating with the sanatorium in an effort to induce the general hospital training schools to take advantage of this offer for as many of their pupil nurses as possible."

PROPER PACKING OF HEADS FOR LABORATORY

We know the men at the Biological Laboratory of our Health Department will feel grateful to us for quoting the following lines, which appeared in one of the latest issues of the *Weekly Bulletin of the New Mexico Bureau of Public Health:*

"Health Officers occasionally complain that the Laboratory is 'no good' because it cannot report on animal heads that reach it in a decomposed state. After countless repetitions of instructions for packing heads, these specimens still arrive in shoe boxes, in tin cans, or wrapped in paper only. When an attempt is made to pack in ice, it often happens that the head is not protected by a watertight container but is put directly in with the ice. As melting proceeds, the temperature rises and the accumulated water hastens masceration of the brain tissue.

"These faults are sometimes due to ignorance of the kind of examination to be made; that the brain cells must be intact in order to distinguish the delicately stained Negri bodies from the surrounding cell structure. In other cases, the packing is left to someone else who does not follow instructions. When the proper procedure is observed, specimens always arrive in good condition.

"The head should be put in a watertight can, preferably sealed with adhesive tape. This can should then be packed in a large bucket or box of ice, sufficient to carry through to the Laboratory.

"Of course, even decomposed tissue can sometimes be used to inoculate a rabbit, but it is not always certain and the time required to reach a positive diagnosis by this method renders it impracticable in most cases where, immediate report is wanted."

TULAREMIA

The discovery of the disease "tularemia", with the isolation of its causative germ, is one of the most outstanding events in the medical history of the past ten years. Tularemia seems to have first appeared in the State of Utah, where cases had been found and described as early as 1910. At the request of Dr. Beatty, the State Health Commissioner of Utah, Dr. Edward Francis, of the United States Public Health Service, was sent out to the State in 1919, to make a special study of the disease. Dr. Francis isolated the "bacterium tularense", from several persons and from many rabbits and was able to prove that this germ was the cause of tularemia.

He also proved that the disease was transmitted from rabbit to man and from man to man through the bite of the *deer fly*. The new disease was termed *tularemia*, from Tulare County, California, where "bacterium tularense" had been discovered in 1912 in a plague-like disease that occurred among ground-squirrels.

Most of the cases of tularemia reported so far have been contracted from handling infected rabbits. The disease seems to be quite prevalent among rabbits in certain sections of the United States. Cases of tularemia in humans have been reported from Utah, Virginia, Wyoming, Colorado, California, Indiana, Idaho, Ohio, Iowa and many other states.

The symptoms of tularemia are stated by Dr. J. W. Wallace, of the Iowa State Department of Health, as follows (*Journal of Iowa State Medical Society*, July 1925):

"The disease has been confused with typhoid fever, anthrax, septicemia, Rocky Mountain tick fever and other diseases. The recent cases discovered in Iowa were first thought to be cases of septicemia.

"Since handling of rabbits and bites of insects are so frequently the means of infection, a complete history of the case is most important. A sore on the hand or any exposed part of the body, enlargement of the cervical, axillary or epitrochlear glands, sudden onset of illness, fever and great prostration, together with headache, bodily pains and possibly chills and vomiting, should cause the diagnostician to keep in mind tularemia as a possible or probable cause. The incubation period is probably under one week, with an average of from two to five days. Most cases occur in the summer or fall. The temperature curve often stimulates that of typhoid fever, and may vary from 101 to 104 degrees Fahrenheit as a maximum, but a Widal test (except for those who have had typhoid vaccine) will differentiate typhoid cases, whereas agglutination tests of the blood serum from the patient who has tularemia will prove positive with organisms of the bacterium tularense. As in typhoid, agglutination tests may be negative in the first week of the disease, but become more marked and show up in weaker dilutions in the third or fourth week of the disease. Under the microscope the tularemia organism is seen to be a very small bacterium, either coccus or rod-shaped in form. It stains readily with aniline gentian violet. Cultures in the laboratory grow readily on egg yolk or cystin, but Dr. Francis has successfully grown them on other media."

The mortality of tularemia, states Dr. Wallace, is very low; not more than one per cent of the cases dying. Among rabbits, guinea pigs and mice, however, it is highly fatal. The pathology of the disease has been studied in rabbits and rodents. The pathologic changes are thus described by Dr. J. W. Wallace:

"A typical liver of an infected rabbit shows small whitish colored necrotic foci. The spleen shows similar small necrotic areas. Microscopic examination

of the infected lymph glands shows giant cells, round cell infiltration, dilation of blood vessels, extravasation of blood and caseation with pus cavities."

No curative treatment has yet been devised for tularemia.

INTERNATIONAL CONFERENCE ON TUBERCULOSIS

An international conference on tuberculosis will be held in Washington, D. C., from September 30th to October 2nd of this year. This meeting will be significant in that it will be attended by distinguished delegates from all the world. From October 4th to 7th, right after the meeting of the International Union, the National Tuberculosis Association will hold its annual meeting.

Some of the distinguished men that will attend these conferences are: Dr. Albert Calmette, Sub-Director of the Pasteur Institute of Paris; Dr. Leon Bernard, Professor of Hygiene and Secretary of the French National Tuberculosis Association, Paris; Sir Robert W. Philip, Father of the Idea of the Tuberculosis Dispensaries, of Edinburg; Dr. A. Rollier, of Switzerland, well-known authority on heliotherapy; Dr. Fred. Neufeld, Director of the Koch Institute of Berlin, Germany; and Professor Gaetano Ronzoni, of Milan, Italy.

HELIOTHERAPY

In an article on heliotherapy which appeared in *The Crusader*, the bulletin of the Wisconsin Anti-Tuberculosis Association, Dr. Arthur A. Pleyte, summarizes the place of heliotherapy in the modern treatment of tuberculosis as follows:

"I believe we are justified, today, in considering sunlight and air baths for most cases of extra-pulmonary tuberculosis and for a large number of pulmonary cases than we were wont to consider it a year or two ago. The stage of the disease is not the most important consideration. However, severe symptoms such as high fever, hemorrhage, exhaustion, and general debility usually do preclude its use. I feel convinced that carefully selected cases of pulmonary tuberculosis should continue to be treated with a complete sun and air bath between the month of May and October; that both local and general exposures with sunlight are helpful for patients with bone and joint tuberculosis and for some patients with pulmonary tuberculosis presenting tuberculous complications; and lastly, that, as patients and as physicians, when we properly evaluate heliotherapy simply as one of five important therapeutic aids in the treatment of tuberculosis, we will agree that heliotherapy has come to stay."