being chiefly local. You must have some agency which can help them develop a service, which can help them find nurses who are qualified to do the work, and which can supply literature which is authentic.

Thank you.

Mr. VINSON. I have been very much interested in your statement because it has the practical range, Miss Peterson. You have been speaking particularly with reference to the work in Minnesota. Have you had opportunity to observe it in other sections of the country?

Miss PETERSON. I have to some extent. I have recently visited about seven or eight other State health departments. I think Minnesota is quite typical of our part of the country. It is not typical of the Southern States, where they have full-time health units.

Mr. VINSON. What did you observe there in the Southern States on your recent visit?

Miss PETERSON. Of course they have quite a different set-up with the full-time county health officer and nurses. We do not have that in Minnesota. We have one full-time health unit. In other counties it is carried on on a voluntary basis by a committee with medical men on the committee who are administering their own problems and trying to carry it out.

Mr. VINSON. Your conclusions are based upon the observation of this work in counties that have the full-time health unit?

Miss PETERSON. Yes; both having full time and not having full time. Not many of the counties in the Midwest have full-time health units.

Mr. VINSON. But you have seen the practical working and the benefits that accrue from the full-time health departments?

Miss PETERSON. Yes. Of course, that is the ideal towards which we are all working. But at the present time we have not even one nurse in more than 20 percent of our counties, and that is quite typical.

Mr. KNUTSON. Miss Peterson, would you tell the committee somethink of the work that is being done in Minnesota by the Minnesota Public Health Service among the Indians in the northern part of this State, along the maternity and child-welfare line?

Miss PETERSON. Yes. The State legislature have appropriated about $10,000 each year for this type of work with the Minnesota Indians. We have at the present time 7 public health nurses working with our 15,000 Indians in Minnesota. It is very interesting to see the result of work among that group which is supposed to be backward. We find in the parts of the State where the service is given to the Indians, the Indian mother comes and gives the white mother information as to how to take care of her baby.

Does that answer your question?

The CHAIRMAN. We thank you, Miss Peterson, for your appearance and the information you have given the committee.

STATEMENT OF DR. GEORGE M. LYON, HUNTINGTON, W. VA.

Dr. LYON. My name is Dr. George M. Lyon, Huntington, W. Va., a private physician, appearing here at this hearing because of my interest in child welfare work, and because of the special needs for the mountain State that I come from, in this particular respect.

This would seem to offer to us an opportunity such as we have never

had before. I desire to show some of the inequalities of opportunity for child health and maternal health protection that these mountain peoples are up against.

In the first place, the mountains may be divided for practical purposes into two types, the counties where coal mining predominates and where the people live on the banks of small streams at the bottom of these big mountain ravines. There we have an urban type of congestion of population with a rural type of sanitation or lack of sanitation, and diarrheal diseases explain the very high death rates that our mountain people have.

Then we have the other type of mountain section, where we do not have any mining, where we do not have any timbering, but the people simply live in a great dispersion of population, and it is impossible for any physician to go down there and make a living because going up and down the "runs" or creek bottoms he runs from one home to another. He can see but a few people in the course of a day. Some men can make perhaps only 3 or 4 calls in the course of 24 hours because the distances are so great and transportation is almost entirely by foot. The handicaps that these people are up against are really very definite. It is for them that I am appearing here today.

The high diarrheal death rate is entirely preventable. It has been shown in other parts of the country that it can be prevented. The same types of infant mortality we have in West Virginia were common in other parts of the country 50 years ago. We are just that far behind in taking opportunities to these poor mountain people. It really seems to us that this is our golden opportunity if this aid can come to us in the way it has been proposed. The supplying of Federal aid, leadership, and planning, as well as financial aid, can lead us out of our wilderness to a very large extent.

The question of sanitation and that type of program in the mountain sections is of definite certainty if it is attempted. The question of good medical aid and child health protection and maternal health protection to these more or less inaccessible rural sections remains a challenging and still rather difficult problem.

I have made some notes here, some 5 pages, in a little more detail which I would like to have inserted in the record.

(Information referred to is as follows:)

Problems of Child Health Protection in West Virginia

(Geo. M. Lyon, M. D., Huntington, W. Va.)

West Virginia and the mountainous section of the Southeastern United States have problems in the protection of maternal and child health which are peculiar to the geographic and industrial endowment to be found therein.

On the basis of differences in needs, the mountain counties may be divided into 2 types: (1) Those with coal mining and characterized by a local congestion of population, and (2) those with no mining and characterized by an actual sparsity of population.

In those nonurban districts where between steep hillsides on the narrow bottom lands the population is concentrated, diarrheal diseases constitute the major preventable hazard to child health. In the sparsely populated rural mountain districts this is not the case and inaccessibility and poor socioeconomic status combine to provide the major barrier to maternal and child health protection. Some counties present mixtures of both extremes. Others have little or none of these handicaps. Lack of understanding of health protection, whether for the mother or child, is pretty generally common in all rural sections of West Virginia.

The prevalence of bacillary dysentery and other forms of infectious diarrhea in the coal fields and adjoining counties accounts for the high diarrheal rate. The spread of these and other communicable diseases is favored by this intimate grouping of the population accompanied as it is by a lack of proper sanitation within the community. From 40 to 80 percent of the children in one typical community were observed to have bacillary dysentery before they were of school age.

In West Virginia diarrheal diseases account for 25 percent of all deaths under 6 years.

For the decade 1923–32, for babies under 2, the average annual toll from diarrhea alone was 1,060 deaths.

Between 1926 and 1931, with the exception of New Mexico and Arizona, West Virginia maintained the highest diarrheal death rate reported in the United States.

During the same period, Logan County, an important mining county, reported 128 diarrheal deaths per 100,000 population per year under 2 years.

This was twice that for the State of West Virginia, six times that for the country at large, and 25 that reported by Oregon and Washington for the same period.

I have chosen this method of trying to emphasize our inequalities.

During 1930 West Virginia's diarrheal death rate was nearly three times that for the country at large and 15 times the lowest rate reported.

The proximity to these dysentery-ridden regions explains why, in 1933, the infant mortality rate reported for Charleston, W. Va., was 6½ times, and that for Huntington, W. Va., 5½ times, the rate reported for Newton, Mass., or Berkeley, Calif.

While the infant mortality rate for West Virginia is but little higher than that for the states adjoining it, its diarrheal death rate is twice that of Maryland, and three times that of Virginia, Kentucky, Ohio, or Pennsylvania. This is all the more remarkable when we recall that 7 percent of West Virginia's population is colored.

These comparisons set out clearly the major problem of child health protection in West Virginia. My own experience in other States in districts which are geographically and industrially similar, leads me to believe that similar conditions exist there, differing perhaps only in degree. Relief from this serious condition can come only with the institution of more adequate community sanitation and even this must be accompanied by the development of a real appreciation and a better practical acceptance of adequate preventive health measures by individuals, the industries, and the public officials of the section.

In Many of the nonmining rural sections, inaccessibility and poor socioeconomic status combine to present a totally different and perhaps less easily solved problem. It is one related primarily to "distribution", or local availability, of medical and health protection services. A general lack of understanding of health protection further augments the problem. Physicians simply cannot make a living in these sections because the livelihood of the individual home maker is so meager and the dispersion of population so great and the ability to go from one home to another so roundabout and tedious of accomplishment that a livelihood from the practice of medicine here is a physical impossibility.

Families living on improved roads, of which West Virginia has many of the finest, do not have as a rule such difficulties in regard to inaccessibility. In other sections the inaccessibility is one of major importance only in the winter time.

Just as the cost of highway construction in these mountainous sections is excessive, so would the cost be excessive to provide even minimal health protection and medical services to the people in these sections. To them at the moment preventive health work is entirely, and essential medical service almost entirely, not available.

It is easy to visualize the immensity of the maternal welfare problem among these people when one realizes that in five counties in 1932, with a total of 2,500 live births reported, only 1,250, or one-half, were attended at delivery by a physician.

The difficulties of contact and particularly of maintaining continuity of contact with families in need of health protection and medical services make this inaccessibility a problem of fundamental importance. It, together with the lack of a profitable industry and constant low socioeconomic and educational status, does not make for a sense of security or equanimity among these people. This matter of inaccessibility is an important factor in every form of maternal or child-welfare work which may be considered for these people. Whether it be the expectant mother, the delirious child or the little cripple; they are all vitally handicapped

by this inaccessibility, and equally so the matters of mental hygiene and the status of social adjustment.

The local governments, as represented generally by the county, are so poor they are essentially helpless in these matters. For the State of West Virginia the load is so excessive and the cost for correction would be so great that it is entirely impossible for the State to correct the unfortunate conditions in its own counties. Unless stimulation to a greater local and State responsibility can be provided, and unless material help can come from some outside source the present conditions will continue or perhaps get worse. These sections need help and the need is acute and extensive. The proposed bill offers chance for help.

It is interesting to note that the State of West Virginia has developed its program for the crippled child in a splendid manner, with far-reaching results. No other phase of child welfare has been advanced to a corresponding degree. The annual appropriation from the State of West Virginia for the division of crippled children has for some years been essentially the same as that for the entire State department of public health.

The proposed plan of maternal and child health protection which could be made possible by this bill can contribute to the development of a social security (1) by assisting the laymen to reliable sources of material or maternal and child health protection, (2) by providing post graduate instruction for those physicians and nurses who are in need of such and who can thereby contribute to the social security of the community, and (3) by developing cooperative programs of maternal and child health protection and nursing service in which will be utilized the facilities of the organized groups of the profession locally and (4) by the furtherance of that important and necessary interrelationship with the public health program. An appropriate and enlarged consultation service in regard to State and local programs of maternal and child health protection, and suitable demonstrations in States where particularly needed, would do much to increase the effectiveness of the program and thereby promote social security.

I have a chart here showing the mining sections which I would like to have you see. You see how that coincides with the high incidence of diarrheal deaths. The shaded areas in each case show the intensity of the diarrheal death rate. When you stop to realize that the people in some of these sections have 25 times as many babies die of diarrhea as they have in other parts of the country, it certainly is an inequality of some significance.

Dr. LYON. Exactly.

Mr. DINGELL. In other words, it would be educational?

Dr. LYON. Very largely that.

Mr. DINGELL. In order to remedy this condition which exists, particularly as it applies, as you say, to the unsanitary privies.

Dr. LYON. That is right.

The CHAIRMAN. Some legislation might be helpful to get rid of the conditions you describe.

Mr. DINGELL. State legislation.

Dr. LYON. We are trying now to get a bill through such as they have in North Carolina.

The CHAIRMAN. You will have a good one if you do.

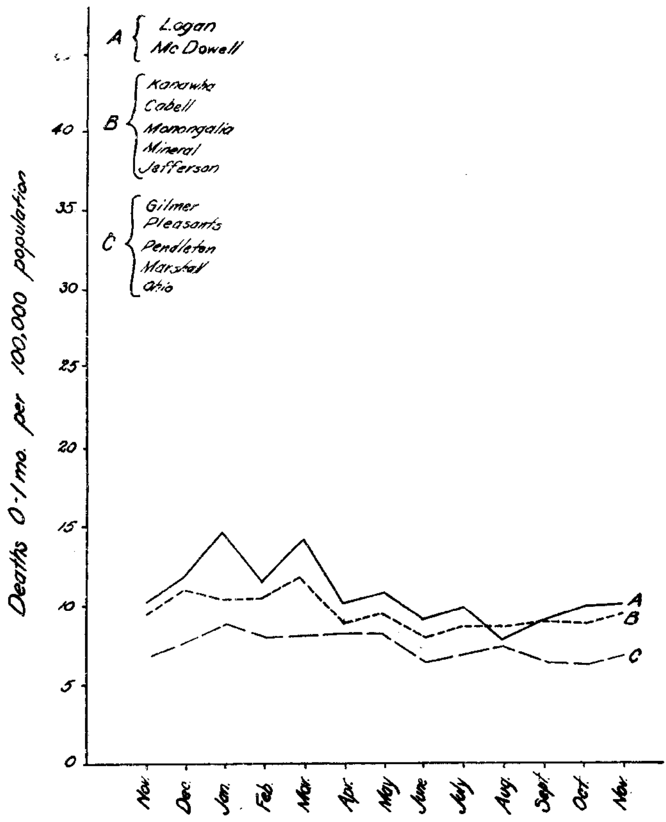
Mr. VINSON. May I ask that the exhibits presented by Dr. Lyon be included in his testimony?

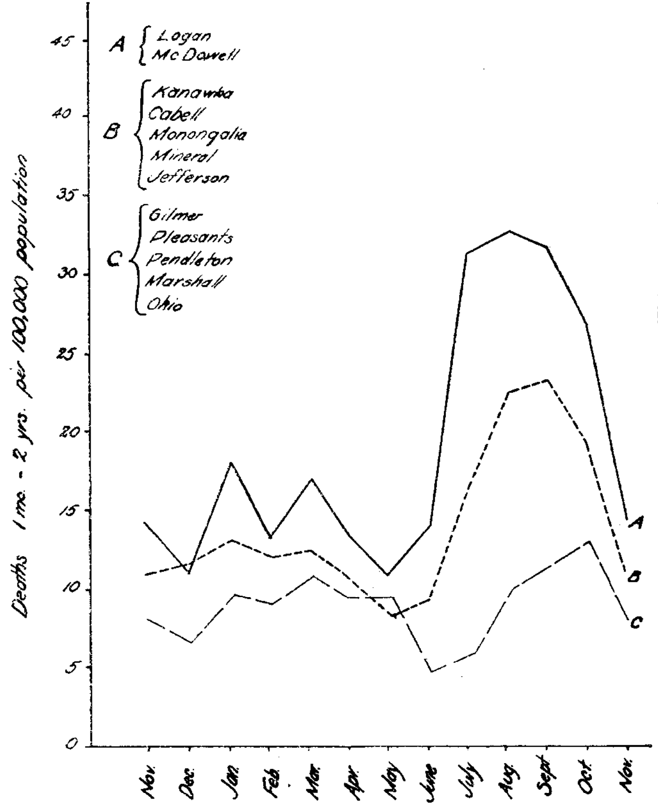
The CHAIRMAN. Without objection the exhibits will be included.

We thank you, Dr. Lyon, for your appearance and the information you have given the committee.

STATEMENT OF DR. LILLIAN R. SMITH, REPRESENTING THE MICHIGAN DEPARTMENT OF HEALTH

Dr. SMITH. I am Dr. Lillian R. Smith, director of the bureau of child hygiene and public-health nursing, Michigan Department of Health.





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