

MILBANK MEMORIAL FUND

# QUARTERLY BULLETIN

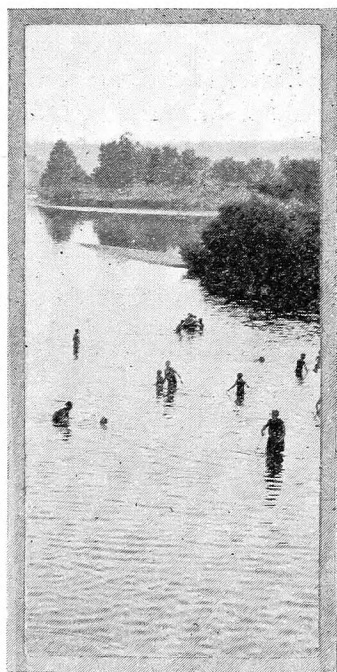
NEW YORK HEALTH DEMONSTRATIONS

Vol. V

JULY 1927

No. 3

## HEALTH OF MOTHERS AND CHILDREN *in* CATTARAUGUS COUNTY



**E**VERY aspect of the rural health demonstration in Cattaraugus County is affected by the general social and economic conditions which this County shares with many another agricultural district of the United States. The number of farms in the County decreased from 6,017 in 1910, to 5,353 in 1925. The amount of land in farms also decreased, though not so much—from 669,960 acres in 1910, to 631,254 acres in 1925. The increase in the value of farm-land and farm-buildings—from \$34.94 per acre in 1910, to \$48.57 in 1925—was more than offset by the decline in the purchas-


ing power of the dollar, so that the larger figure for 1925 represents a smaller value in exchange. Although dairying is still the chief industry, less milk was produced in 1924 than in

1919; and the aggregate value of the principal crops in 1924 was considerably less than the value of the same crops in 1919, even when allowance is made for the rising value of the dollar between the two dates.


The population is shifting, naturally, from the country, where it is increasingly difficult to make a living, to the cities and towns, where the industrial and economic conditions are more favorable. The two cities, Olean and Salamanca, which in 1900 had together only 13,713 inhabitants, had 31,210 in 1925; and by that time there was one other town large enough to be classed

as "urban," bringing the total "urban" population in 1925 to 39,667. The rural population, on the other hand, decreased from 51,930 in 1900, when it was 79 per cent of the total population of the county, to 34,111 in 1925, when it was only 46 per cent. In general it is the young people who move; and in general the more vigorous and the more adventurous of the young people.

The economic results of the present status of agriculture, and the social effects of the shifting and sifting of the population from rural to urban centers, are factors which must be



THE importance of medical supervision of expectant mothers, of home supervision and instruction during pregnancy, of bedside nursing for maternity cases under certain conditions, of instruction in the care of pre-school children—are some major considerations encompassed in the work in "Maternity, Infancy and Child Hygiene in Cattaraugus County," which is described here. The article is based on a paper given by Dr. Doris A. Murray at the New York Health and Tuberculosis Conference held in New York City in January.



reckoned with in building up a rural public health program. Another fundamental difference between rural and urban conditions which is significant in this connection is the greater

IN order "that there might be some disinterested body, of scientific standing, to maintain a bureau of information and to conduct further investigations in the technical, legal, and economic aspects of the problems of school ventilation," the New York Commission on Ventilation recently resumed its activities, unofficially. Initially appointed by Governor Sulzer in 1913, the Commission conducted exhaustive studies covering a period of four years. Its present objectives and program are summarized on pages 65 to 70.

importance of the practising physician in the country. In a rural district everyone has a "family physician," in the sense that to the question, "Who is your doctor?" the reply nearly always is, "Dr. So-and-So," and not, as frequently in the city, "Why, we haven't got any regular doctor." It is, therefore, of even greater importance in the country than in the city to have the interest and co-operation of the practising physicians.

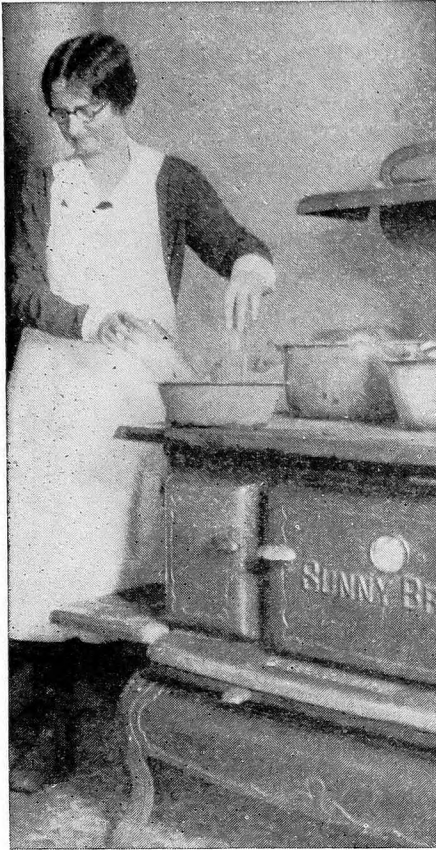
tising physicians.

There are other differences between the city and the country which constitute definite handicaps for the rural public health worker. One of the most serious of these is the lack of adequate and accessible hospital and dispensary facilities for remedial work and the correction of physical defects. Still another grave problem in rural districts—one which city workers can hardly realize, however often it may be mentioned—is the difficulty of getting about over country roads, especially in winter, and the consequent isolation of many of the people. Only one farm out of four in Cattaraugus County is located on a road paved with concrete, brick, macadam, or



gravel; 31 per cent are on unimproved dirt roads. To attend a conference or clinic is a great undertaking at any time for a woman from many of these homes, and it is almost impossible when the roads are deep in snow or mud. On the other hand, it is equally difficult for the public health nurse to reach the homes in remote, inaccessible spots, and the problem of providing home supervision, therefore, presents a formidable task for the County Department of Health.

**A**LL these difficulties, obviously, only increase the need for public health work in rural areas, and specifically for measures which will protect and improve the health of

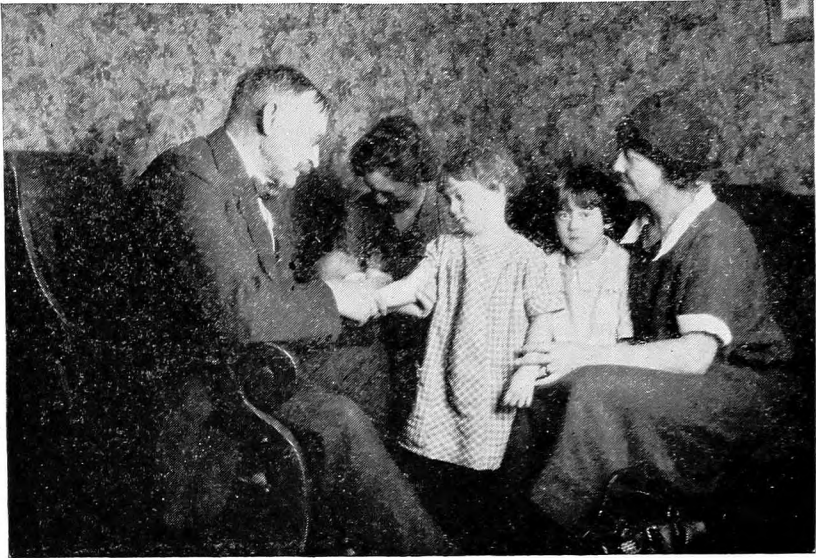


mothers, babies and small children. The ideals of this subdivision of the health program, as stated by Sir Arthur Newsholme, are "to improve the health of the expectant mother and safeguard her against the dangers of childbearing; to insure for the infant the initial good start which parental health and breast-feeding can promote; to protect the infant against the dietetic and other hygienic dangers of infancy; and to continue this protection during the next four years of life, when the child is assumed to come within the range of school medical inspection." An adequate pro-

gram for the protection of mothers and children should, therefore, include instruction to growing boys and girls—the fathers and mothers of the future; as well as actual health supervision for the mothers and babies of the present, extending from the pre-natal period through the puerperium, and continuing through infancy and early childhood to school age.

There are three well established methods of carrying on such a program: (1) general educational work; (2) periodic conferences, such as pre-natal clinics and child health conferences; and (3) most important of all, visitation in the





homes by the public health nurse. The general educational work should have a two-fold purpose; both to arouse the interest of the leading citizens in this work and to gain their active support; and also to give parents concrete and practical information regarding the preventive measures which should be employed for the welfare of both mothers and babies.

In Cattaraugus County the responsibility for this part of the health program, in the entire County except the City of Olean, is vested in the Bureau of Maternity, Infancy and Child Hygiene of the County Department of Health, which was organized in 1926. The Director of the Bureau, Dr. Doris A. Murray, was appointed in July. The nursing service for this Bureau is provided by a certain proportion of the time of fifteen field nurses, who are carrying a generalized public health nursing service with specialized supervision. The Special Supervisor in Maternity, Infancy and Child Hygiene was appointed in February, 1926. During 1926, the nurses made 9,760 visits to mothers and children. A third of

their time, including service at conferences as well as home visits, was spent in work for this department. In the first quarter of 1927, this proportion of time had increased to 43.7 per cent.

**T**HE first element in the program as outlined above—the preparation of boys and girls for their responsibilities as the fathers and mothers of the next generation—is represented in Cattaraugus County by several activities. All the work to improve the health and physique of children, whether in or outside the schools, whether in education and inculcation of hygienic habits or in securing the correction of physical defects, is a contribution to this object. More specific is the instruction in sex hygiene which is provided for boys and girls as part of the comprehensive educational program in social hygiene. Another special means employed in Cattaraugus County is a course of lessons on child care which has been offered during the past school year, 1926-27, to the older girls in the country schools—occasionally attended by boys as well. A syllabus was prepared by the Special Supervising Nurse; simple equipment was selected to use as demonstration material, most of which could easily be made at home at slight expense; and the field nurses were trained in presenting the lessons. These classes not only give instruction to the



girls at an impressionable age, but they also serve as a means of introducing correct ideas regarding child hygiene into many homes. By the end of May, 1927, approximately four hundred pupils had received certificates for satisfactory completion of the course.

WAYS and means of providing adequate pre-natal supervision constitute one of the most pressing problems in public health today. "It has been estimated," says Dr. John A. Ferrell of the International Health Board, "that 70 per cent or more of pregnant women in the United States have no advice or instruction during pregnancy, and that even more fail to have a thorough examination to see whether or not they are physically fit to go through the ordeal of childbirth." Largely because of lack of this care, some 24,000 women die in the United States every year, and our maternal mortality remains excessively high—twice that of Great Britain, three times that of Holland and Denmark. Nor is it only the mothers who suffer. Stillbirths and early infant mortality are as distinctly a part of the pre-natal problem as maternal mortality. Every year in the United States some 72,000 babies die during the first week of life. While the general infant mortality has been very substantially cut down, the reduction has been mainly in the gastro-intestinal group of diseases. Thus far "we have failed," says Dr. Richard A. Bolt of the University of California, "to make any distinct impression upon the stillbirths and early infant deaths."

These general statements hold true for Cattaraugus County. In 1926, of all the babies who died under one year of age, 67 per cent had lived less than one month; and 55 per cent of all the infant deaths were due to congenital malformations and debility or prematurity.

In attempting to provide pre-natal supervision in a rural



district the primary problem is to find the cases. The number of women who take the initiative in seeking advice is small at first, but should increase as the educational efforts progress and the need for supervision becomes known. Meanwhile all other available means must be used. Cases can be found by nurses in their home visiting. They will be reported by friends and discovered among the women who bring children to conferences and clinics.

To create a sympathetic and intelligent public opinion educational work is carried on through bulletins, letters, and addresses to Home Bureau groups, Grange meetings, Parent-Teacher Associations, Nurses' Committees, social clubs, church societies and other organizations, as opportunity presents itself. These talks outline the essentials of adequate

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County by the public health nurses, who in every case try to get the woman under medical supervision as early in the period of pregnancy as possible. The nurse advises the

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woman about supplies, equipment, and preparation for delivery; gives instruction in personal hygiene; and reports to the attending physician the condition of the patient, noting especially any danger signals she may have observed.

A third method of getting pre-natal cases under the physician's care is through the establishment of pre-natal clinics, where the necessity of early and continuous medical supervision can be vividly impressed. The first pre-natal clinic in the County was organized in May, 1927.

Like most rural communities, Cattaraugus County suffers from a lack of adequate facilities for the care of maternity cases. The only free hospital accommodations for such patients are in the cities. While one-third of all the births in the County in 1926 took place in hospitals, these were practically all cases from the cities of Olean and Salamanca and their immediate vicinity. Of the 441 births in the other four health districts, only thirteen, or 3 per cent, took place in the hospitals.

Nursing care for maternity cases is provided for cases which have been under pre-natal supervision and for which it has not been possible to arrange other nursing service; and for cases where the physician anticipates a difficult delivery, and requires trained assistance.

This problem—how to assure adequate maternity service for all women in rural areas—is bristling with questions for which no final answers have yet been found. Does the solution lie in establishing a county hospital or several small maternity homes?

**T**HE work for babies and young children in Cattaraugus County is viewed as a unit. It is the ideal that they should all be under routine medical supervision, from birth until they enter school, when they come under the supervision of the school medical service.

Educational work is carried on, as in connection with the pre-natal program, both to enlist a favorable attitude on the part of the influential public, and to spread concrete information about the value of breast-feeding, the proper care and diet for children, how to guard against rickets and the preventable diseases of childhood, the importance of prophylactic doses of iodine for the control of goitre, of vaccination against small-pox and of toxin-antitoxin immunization against diphtheria, and so on. More intensive instruction on the same topics is given in lessons to small "study groups."

In order to provide routine physical examination for well children not already under the care of their family physicians, child-health conferences have been organized throughout the County. They are held once a month at different points, either in the district health stations or in other quarters.

At these conferences the public health nurse takes the child's history and gives general health advice. In most instances a member of the Nursing Committee helps with the weighing and measuring of the child. The physical examination is conducted by local physicians. In most of the communities there is a rotating service among the physicians, but in a few places the local health officer is the only attending physician. At these conferences the services and advice of the Director of the Bureau are available.

As an aid in standardizing the examinations a uniform record card is used. After the examination a verbal report of the physical condition of the child is made to the mother, and time is taken to explain to her why it is important for her to go to her family physician for advice. The conference cards are brought to the central office, and a report on each child referred to the family physician is sent to him by the Director of the Bureau. Another report is sent to the nurse in the district for her guidance.



Periodic examination and routine supervision of the well child is an innovation which has a long and hard road to travel before it is thoroughly accepted as a necessity in rural communities. The success of child-health conferences depends largely on the public health nurse. She must make a personal visit—frequently more than one—to get the mother sufficiently interested to bring her well child for examination. She must make at least one visit after the conference, to see that the recommendations are carried out. Usually also a visit is necessary to get “return cases” back for re-examination, since as yet personal notification by mail, supplementing local advertising, meets with only a limited response.

Thirty-five conferences were held in the first four months of 1927, with an aggregate attendance of 339 children, of whom 224 were new cases, and 44 per cent were babies under one year of age. The average attendance was 9.7. This was a 40 per cent increase over the average attendance at the conferences held during the last four months of 1926—an increase in the numbers both of new cases and of registered children.

The amount of advice which should be given to the mothers

at the conferences is a subject of much controversy. Other puzzling questions are:

How often should re-examinations be made at the conference when no corrective work is done?

To what extent can the local physicians be expected to treat cases free of charge which in a city would come under the care of a dispensary?

Would it be feasible for County Medical Societies to appoint certain of their members to treat cases unable to pay? If so, should they receive compensation, and how should it be provided?

Would it not be very difficult to decide whether a patient is able to pay, without a thorough social-service investigation?

Besides these periodic medical conferences, health conferences are conducted by the public health nurses, to which mothers can bring their babies and small children for weighing and measuring. At these conferences actual demonstrations are presented. At some the nutrition specialist demonstrates the proper selection and preparation of cereals, vegetables, and fruits. At others the demonstration includes the baby's bath and cloth-





EXTRACTS FROM AN ADDRESS

by J. H. MASON KNOX, M. D., *Director,*  
*Division of Child Hygiene, Maryland State Board of Health*



¶ Dr. Murray has put her finger on the point that we must emphasize in the next five or ten years in rural maternity and child health work, namely, the importance of better pre-natal and of septic care.

¶ Experts in psychology tell us that the optimal time to make girls realize the importance of health to mothers and children is just after the doll period: ten, twelve, thirteen years of age.

¶ In Maryland we are sending a circular on home making, including information about the importance of pre-natal care, to every married couple three weeks after their marriage is

registered. We have had exceedingly good results from the practise and no objections have been raised.

¶ Public health nurses can do a great deal in furthering pre-natal care and in promoting better obstetrical practise.

¶ There is a value about human life which is spiritual, and which can not be measured in terms of so many visits. A visit by one nurse may have a value which is entirely out of proportion to ten visits made less carefully by another nurse. Figures only speak part of the result. Until we learn this, some of us will be a little bit disappointed, I think, about our results.

ing and the proper clothing for the pre-school child. The object of this work is to get all babies and pre-school children under routine medical supervision, either by private physician or at a conference; to teach mothers the importance of breast feeding; to instruct mothers regarding proper care of babies and young children; to note abnormal conditions in children and get them under medical care; to help the mother carry out the physician's instructions; and to do follow-up work among children registered at child-health conferences.



WHAT yard-stick shall be used in judging results? Surely not death rates alone, for in so small a group three or four deaths due to exceptional conditions may markedly affect the rates. Such a program, moreover, aims to prevent much more than death—rickets and malnutrition, for example—and to improve in a positive way the health of mothers and babies and little children, so that each child will enter school as nearly “100 per cent fit” as possible. It will be possible, as the years go on, to see results in a lessened number of defects and a smaller amount of malnutrition in the children in the first grade of school. It will be possible to see results also, though it may be impossible to measure them, in that intangible thing known as the standard of living. The health habits of the community must be scrutinized, to see if they reflect evidence of the educational efforts.

In such a composite picture—of decreased death rates, corrected defects, improvement in certain phases of the standard of living—progress may be marked toward that dreamed-of time when every child shall be a healthy child of healthy parents, so that he faces a clear road to healthy manhood or womanhood.





*THE ultimate object of public health work is to step  
I outside the range of disease and by physiological  
measures to anticipate and prevent illness. This should  
especially be so in regard to motherhood and childhood.*

—SIR ARTHUR NEWSHOLME, M.D., K.C.B.