

III.

ESTIMATE OF THE COST OF SOCIAL WORK IN CONNECTION WITH EXAMINATION AND TREATMENT OF OTHER MEMBERS OF FAMILIES OF SYPHILITIC PATIENTS THROUGHOUT THE STATE, BASED UPON 147 CASES DEALT WITH IN EIGHT MONTHS AT THE PSYCHOPATHIC HOSPITAL.*

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IN the first eight months of prophylactic work for the families of syphilitic patients at the Psychopathic Hospital, the time given by the Social Service was equal approximately to one-half of the time of a social worker. The families of 147 patients were dealt with, 145 persons were brought to the Out-Patient Department for examination, representing 72 families among the whole number of families approached. In 25 cases all the members of the family were examined. For 35 persons treatment was given at the Psychopathic Hospital, and for 17 others, treatment was recommended elsewhere. On the basis of this work it may be estimated that one social worker on full time could deal in one year, or eleven months (allowance being made for the vacation period), with the families of 400 patients in the way indicated above, and described more fully by Miss Wright, social worker, in her paper on "Methods of Investigation." This estimate does not, of course, allow for social treatment of the cases, beyond securing the medical examination and blood test, getting a minimum social history, and giving advice about obtaining prescribed treatment.

If in special cases further services were required from the social worker, the time required for such work would have to be estimated according to the time needed for regular social case work.¹

It is possible that if the social worker undertook a smaller number of families than 400, by more persistent effort she might succeed in securing the examination of a larger number of persons. However, it must be expected that many of the families approached will not respond. In most cases there are difficulties in the way of the examination at the hospital to be overcome, such as: distance from the hospital, the inconvenience of staying away from work, absence from home, and most difficult of all, the objection of a seemingly healthy person to undergo an examination. This obstacle is increased

because it seems necessary in the present state of public sentiment in regard to syphilis that the social worker shall refrain from explaining the special reason for the examination and use only general expressions as to its desirability.

If 400 cases be taken as the number to be dealt with by one social worker in a year, and if the percentage of syphilitic patients among the insane, who are admitted to the state hospitals be taken as 20%, a need of half the time of one social worker is indicated for every 1000 admissions. At the Psychopathic Hospital, the percentage of syphilitics is estimated to be 15%, so that during the year October 1, 1913, to September 30, 1914, when the total number of new patients was 2666 (1853 first admissions in the House and 813 new patients in the Out-Patient Department) there must have been approximately 400 syphilitic patients, indicating that the time of one social worker should have been given to this form of prophylactic work.

The admissions for the same year to the other state hospitals from the community were 2783. As 211.3% of admissions last year were readmissions, the number of cases for this action would be somewhat reduced after the system had been installed. In the year 1913 to 1914, it may be estimated that one social worker on full time and another on half time would have been required to secure examination and treatment for the families of all syphilitic patients admitted to the state insane hospitals, so far as the persons approached could be induced to respond; and one additional social worker was needed for the same work at the Psychopathic Hospital.

IV.

A FEW ECONOMIC FACTS OF THE SYPHILIS PROBLEM, FROM THE PSYCHIATRIC SIDE.*

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DURING the calendar year 1914, 3039 new cases entered the Psychopathic Hospital,—1926 in the House, and 1113 in the Out-Patient Department.

Three thousand two hundred and thirteen Wassermann examinations of blood, or spinal fluid, were made during this year. Of this number, 780 were positive, or doubtful. These reactions appeared in 507 cases. Thus, in round numbers, among 3000 patients, 500, or 16.6% showed positive, or doubtful reactions for syphilis.

Further study of these 500 cases showed 208 of them to be suffering from general paresis,

* Being S. B. I. Contribution whole number 124 (1915.27) *Bibliographical Note.*—The previous contribution was No. 123 (1915.26) by Helen M. Wright, entitled "Examination and Prophylaxis for Syphilitic Patients and Their Families: Methods of Investigation at the Psychopathic Hospital, Boston, Massachusetts, 1915." BOSTON MEDICAL AND SURGICAL JOURNAL, CLXXIII, No. 24, 1915, p. 809.

¹ See "Further Notes on the Economic Side of Psychopathic Social Service" by Mary C. Jarrett, read at the Second Annual Conference of the Medical and Social Work of the Psychopathic Hospital, Boston, June 20, 1914. BOSTON MEDICAL AND SURGICAL JOURNAL, CLXXI, No. 23, Dec. 3, 1914.

* Being S. B. I. Contribution whole number 125 (1915.28). *Bibliographical Note.*—The previous contribution by Mary C. Jarrett, entitled "Estimate of the Cost of Social Work in Connection with Examination and Treatment of Other Members of Families of Syphilitic Patients Throughout the State, Based Upon 147 Cases Dealt with in Eight Months at the Psychopathic Hospital," BOSTON MEDICAL AND SURGICAL JOURNAL, CLXXIII, No. 25, 1915, p. 921.

tabo-paresis, feeble-mindedness, epilepsy, or some other condition, presumably due to a syphilitic infection,—conditions that almost-always need institutional care.

In other words, of the 3000 cases admitted to the House and the Out-patient Department, 500, or 16%, showed positive, or doubtful reactions for syphilis, and of these 500 cases, 200 were suffering from conditions due to a syphilitic infection and needing institutional care. That is, 200 out of 3000, or 6% of the total admissions were candidates for institutional care because of the results of syphilitic infection.

In the state institutions of Massachusetts, there were over 15,000 patients in 1913; 8.32% or over 1100 of these cases, were diagnosed as general paresis. Thus, this estimate of 6% for the Psychopathic Hospital is probably below, rather than the true status of affairs. But assuming that 6% is a fair figure, this means that in the state of Massachusetts, some 900 individuals are in state institutions, and in part or wholly, state charges, as a result of syphilitic infection.

It costs some \$223.60 per annum to support an inmate of a state institution. At this rate, over \$20,000 is spent in one year to care for individuals who are suffering mentally as the result of syphilitic infection.

A dose of salvarsan now costs \$5.00. It is estimated that ten doses might have some beneficial results in treatment of cases of this sort. This means \$45,000 for salvarsan alone if treatment is undertaken for these cases.

If one automobile kills, or totally incapacitates a man, a lawyer tells me that \$5000 is an average amount paid for damages. At that rate, \$4,500,000 is the damage that the spirocheta has done to the 900 patients in the state institutions of Massachusetts.

As you know, syphilis is not a disease that affects an individual alone. It is visited upon his children. Complete records of the family histories of these cases were not to be had. Among 70 cases, however, 133 deaths in the families were recorded, 52 miscarriages and 8 still-births—a total of 193. If these children's deaths were due to syphilis, and if this ratio holds throughout all the cases, 2490 children born and unborn, related to the patients in state institutions in 1914, have died from syphilis. And yet it is known that women having syphilis of the nervous system, do not miscarry nearly as frequently as do other syphilitics. Consequently, no one has any knowledge of how many infants and children die each year in Massachusetts as a result of syphilis.

Lest it be thought that syphilis is a disease of the poor and socially inefficient, the following list of occupations is given which were noted among the occupations of these patients:—

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|----------------|-------------------|
| 1 Architect | 1 Banker |
| 1 Accountant | 1 Insurance Agent |
| 1 Store-keeper | 1 Stenographer |

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|----------------------|------------------------------------|
| 2 Jewellers | 1 Solicitor |
| 1 Journalist | 1 Policeman |
| 1 Ship Chandler | 1 Wool Broker |
| 1 Photographer | 1 Clergyman |
| 1 Blue Printer | 1 School Manager |
| 1 Farmer | 1 Bank Clerk |
| 1 School Teacher | 1 Superintendent of Electrical Co. |
| 1 Milliner | 1 Physician |
| 5 Traveling Salesmen | |
| 1 Actor | |

Lest it be forgotten that the community may be endangered by the inefficiency of these individuals—inefficiency that may develop without warning—the following list is given of some of the potentially dangerous occupations of these patients:—

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|----------------|-----------------------|
| 3 Engineers | 1 Boat Captain |
| 2 Druggists | 1 Railroad Signal Man |
| 3 Electricians | 1 Car Inspector |
| 2 Conductors | 1 Motorman |
| 1 Janitor | 1 Lighthouse Man |

And lest we forget how close home this disease may be brought to all of us, this list of occupations of these patients is given, although it is to be remembered that only under certain conditions and in certain stages of the disease, is it strongly contagious:—

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|-----------------|-----------------|
| 7 Waiters | 1 Nurse Maid |
| 1 Trained Nurse | 1 Fruit Peddler |
| 5 Barbers | 1 Milkman |
| 3 Caterers | 1 Grocer |
| 2 Cooks | |

These are some of the economic facts regarding this disease as seen at a hospital for mental diseases.

In New York City last year, during a period of 14 weeks, syphilis stood first in the list of infectious and contagious diseases, with 28% of the total number reported; tuberculosis was next, with 21%, and afterward, diphtheria, measles and scarlet fever, in the order named.

We all know what is being done to eradicate tuberculosis, which maims the body of the individual; but syphilis, which maims both body and mind, and is visited upon the generation yet unborn, is scarcely mentioned in the public press because many of the cases are venereal in origin.

(To be continued.)

Clinical Department.

FRACTURE OF THE TRANSVERSE PROCESSES OF THE FIFTH LUMBAR VERTEBRA.

BY LLOYD T. BROWN, M.D., BOSTON,
AND
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A GREAT deal of attention lately has been given to the lumbar and lumbo-sacral spine as a cause of backache. In any large series of x-rays, such as one sees at the Massachusetts General Hospi-