

SOCIAL AND ECONOMIC PROBLEMS IN THE CONTROL OF TUBERCULOSIS¹

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TUBERCULOSIS tends to undermine the economic stability of families. The high incidence of tuberculosis from ages 20 to 40, the most productive years of life and the years in which family responsibilities are heaviest, is an important factor. The long-continued duration of the disease is another important factor. Every person working in the field of tuberculosis is aware of the economic problem of the tuberculous. However, little precise and definite information bearing on this phase of the problem has been assembled. It seems appropriate, therefore, to present some data available from the experience of the Association for Improving the Condition of the Poor concerning the social and economic problems in the control of tuberculosis.

TUBERCULOUS FAMILIES IN SYRACUSE

A study made by the New York Association for Improving the Condition of the Poor of the relief of tuberculous families in the City of Syracuse in 1928, with the support of the Milbank Memorial Fund, gave some significant facts. Of 1,288 families known to the Health Department of Syracuse at that time, 296 families, or 22.9 per cent, were classed as economically stable families. The remaining 992 families (77 per cent) either availed themselves of the free health or social services of the community or of both services, or, if they failed to do this, were regarded as requiring such care or relief. This study was concerned primarily with the adequacy of relief, and it demonstrated that the amount of relief was for the most part temporary and of an emergent character; was inadequate in amount

¹ Presented at the Round Table on Tuberculosis, Sixteenth Annual Conference of the Milbank Memorial Fund, March 29-31, 1938.

² From the New York Association for Improving the Condition of the Poor.

in nearly all families; was for the most part given in the form of grocery orders and relief in kind not carefully related to the needs of the family; and that the dispensing of relief was not in the hands of personnel with sufficient training to accomplish the best results.

FAMILIES IN MULBERRY DISTRICT, NEW YORK CITY

More recently the A.I.C.P. has been making a special study of tuberculosis in the Mulberry District of New York City. While this study is being conducted among families supervised by the City Department of Health and the Mulberry Health Center mainly for the purpose of exploring the relative advantages and costs of different methods of discovering new cases of tuberculosis, some data have been assembled with regard to the social and economic condition of these families. The important findings from these records have been put together under the supervision of Miss Jean Downes and are as follows:

During the past year (1937) eighty-four families, including 379 individuals, in which there was or had been recently an active case of adult pulmonary tuberculosis, were given public health supervision. The frequency of occurrence of certain social and economic conditions among these eighty-four families may be compared with similar conditions among 494 families composed of 3,056 individuals supervised because a child in the family was found to have tuberculous infection or childhood tuberculosis.

The living conditions in respect to housing are so uniform in the district, and the range of the income level of the families is so limited, that important differences between the two groups of families were noted in only three aspects.

1. In 87 per cent of the 494 families (those supervised because of infection or childhood type tuberculosis), both the husband and wife were a part of the present household. This was true for only 45 per cent of the eighty-four families where there had recently been an active case of adult pulmonary tuberculosis. In the eighty-four

families the husband or wife was out of the household chiefly because of death. Death of the husband as a cause of broken families occurred four times as frequently as death of the wife.

2. Fewer persons per family were noted among the eighty-four families because of the high proportion of broken families among them. Consequently, the index of crowding was lower for this group, that is, fewer persons per room. In 43 per cent of these families there was one or less than one person per room contrasted with only 14 per cent with similar conditions among the 494 families in which there was no adult pulmonary tuberculosis.

3. Twenty-eight per cent of the husbands (living) in the families where there had been adult pulmonary tuberculosis were unemployed during 1937 contrasted with only 12 per cent of the husbands in this class in the 494 families supervised because of infection or childhood type tuberculosis.

Both groups of families were similar in respect to employment of the wife, amount of rent, relief status, and income.

In approximately 30 per cent of the families in each group the wife was a wage-earner, and in only 4 per cent of the families was she a part-time wage-earner doing the type of work that could be brought into the home.

The amount of rent paid per month was similar for both groups of families. About 36 per cent paid less than \$20 per month, and slightly less than 80 per cent paid less than \$30 per month.

When the relief status of the family is considered, again the findings are strikingly similar for both groups of families. Fifty-four per cent of the eighty-four families in which there was recently an active case of adult pulmonary tuberculosis had some form of relief or assistance during 1937. Fifty-one per cent of the 494 families supervised because of tuberculous infection in a child in the family fell into the same category.

In this particular study, income is considered in relation to a minimum budget for families set up by the Association for Improv-

ing the Condition of the Poor. This budget makes no provision for medical, dental, and oculist services, vacations, recreation, or savings for emergencies, but includes food, rent, fuel and light, and clothing. Carfare is also included for working members of the family. On the basis of all income in the family, the per capita income per year either above or below the minimum budget has been calculated for each family. Putting the income on a per capita basis takes into account the size of family or household, and relating income in such a manner to a subsistence budget affords perhaps the most accurate picture of the real level of living of these families.

Including the families which had some form of relief or assistance during 1937, 62 per cent of the eighty-four adult pulmonary families had an annual per capita income below the minimum budget. Fifty-six per cent of the 494 families (infection and childhood type tuberculosis) also had an annual per capita income below the minimum budget. The annual per capita amount necessary to bring the families in both groups up to the level of the minimum budget varied from \$15 to \$115.

If the families receiving relief or some form of assistance be excluded, 32 per cent of the families in both groups had an income below the minimum budget requirements. The per capita amount needed in these families annually varied from \$15 to \$115 per year. For those families having an annual income above the minimum budget, the per capita amount above the budget was predominantly within a limited range, namely, from \$1 to \$35 per person per year.

It is evident from these data concerning income that the general level of living for the families in the Mulberry District is low. Even with assistance, a high proportion had an income inadequate for even the minimum budget including only food, rent, fuel, light, and clothing.

It is apparent also that certain social and economic problems are apt to be more acute in families where there is or has recently been an active case of adult pulmonary tuberculosis. Absence of the hus-

band or wife because of death occurred more frequently among such families, and a higher proportion of the living husbands in these families was unemployed.

INCOME OF FAMILIES IN A.I.C.P. TUBERCULOSIS FAMILY DIVISION

Another group of facts bearing on the economic and social instability of tuberculous families is shown by an analysis of the income of 566 families including 2,454 individuals known to the Tuberculosis Family Division of the Association for Improving the Condition of the Poor in March, 1938.

These data shown in Table 1 give facts with regard to 566 families containing 2,454 individuals under the care of the Tuberculosis Family Division of the New York Association for Improving the Condition of the Poor in March, 1938. It will be noted that 274 of the 566 families had no earnings; 61 of the families, on the other hand, earned the full minimum standard budget deemed necessary by the Association. The total earned income of all these families was \$21,789 for the month of March, and the budget deficit totaled \$25,120. The budget deficit per family varied from \$16.93 to \$123.42

Table 1. Study of income of 566 families known to the Association for Improving the Condition of the Poor, Tuberculosis Family Division, March, 1938.

NUMBER OF INDIVIDUALS IN FAMILY	NUMBER OF FAMILIES	TOTAL INDIVIDUALS	NUMBER OF FAMILIES EARNING FULL BUDGET	FAMILIES WITH NO EARNINGS	TOTAL A.I.C.P. BUDGET	MEMBERS OF FAMILIES EARNED	INCOME DEFICIT	AVERAGE DEFICIT PER FAMILY
1	57	57	1	50	\$2,139.72	\$ 265.65	\$1,874.07	\$32.88
2	77	154	7	48	4,512.44	1,478.02	3,034.42	39.41
3	81	243	6	43	5,608.60	2,580.23	3,028.37	37.39
4	117	468	7	49	9,270.38	4,271.00	4,999.38	42.73
5	96	480	17	38	9,233.12	4,622.42	4,610.70	48.03
6	43	258	8	15	4,474.40	2,383.99	2,090.41	48.61
7	33	231	6	15	3,643.93	1,555.68	2,088.25	63.28
8	28	224	7	7	3,455.75	2,326.15	1,129.60	40.34
9	20	180	1	5	2,531.32	1,265.67	1,265.65	63.28
10	4	40	0	3	524.01	30.33	493.68	123.42
11	5	55	1	1	749.94	455.93	294.01	58.80
12	3	36	0	0	393.08	342.29	50.79	16.93
13	1	13	0	0	154.72	43.33	111.39	111.39
15	1	15	0	0	218.26	168.99	49.27	49.27
TOTAL	566	2,454	61	274	\$46,909.67	\$21,789.68	\$25,119.99	\$44.38

with an average deficit per family of \$44.38 per month. While this is a selected group of families it does indicate, nevertheless, that tuberculosis tends to precipitate situations which undermine the economic stability of the family, and that this presents a problem that cannot be escaped by those interested in the control of tuberculosis.

Attention should be called also to the fact that in the adequate care of the tuberculous patient and his family much more is involved than the provision of needed income. To make a good adjustment to his disease the tuberculous patient must be taught a new way of living. The tuberculous family must also be re-educated if preventive health measures are to be effective. Too often the patient after completion of a successful period of sanatorium treatment may come back into a home situation which completely nullifies the work of the hospital or at least mars it.

In conclusion, certain general observations concerning the social and economic problems of the tuberculous may be made. They are as follows:

1. Tuberculosis precipitates economic and social problems in the great majority of cases infected.
2. It is quite impossible to arrest and control tuberculosis on a family budget inadequate for the simplest requirements of food, clothing, housing, and the necessities of life, no matter how much effort is spent on medical diagnosis, medical treatment, nursing supervision, or sanatorium and hospital care.
3. There is much waste of the time and efforts of clinic physicians and nursing staff and of expenditures for these services because necessary social services and needed relief for the families treated are not available.
4. Hospital and sanatorium care too often fail in their objectives because there is inadequate attention to the personality of the patients and the social and economic needs of his family. Discharged against the advice of the physician is a very frequent record in

hospitals and sanatoria. We will continue to record these failures until we treat personalities as well as germs, and until we provide needed income and guidance to families of patients.

5. In the main, those responsible for the control of tuberculosis have not accepted the responsibility of insuring adequate attention to the economic and social needs of the family although their efforts to control it in families in which it has been diagnosed are all too frequently made ineffective if not completely futile without this.

6. It is more possible to secure relief for tuberculous families now than previous to 1930. The depression and its extension of public relief has made relief for tuberculous families more possible than it was before.

7. Experience in New York City and elsewhere has demonstrated that it is possible to secure from relief authorities special consideration for tuberculosis cases. This should be urged in all communities.

8. Further amendment of the Social Security Act adding tuberculous families to those eligible for relief with Federal aid should be secured if the alternative plan urged for Federal aid to all families in need is not adopted. This, together with special allowances for tuberculosis, should do much to help solve this problem.

9. In any event, more integrated and coordinated efforts of public health departments, public welfare departments, and hospitals and sanatoria are needed to secure the utmost possible help from present facilities. The problems of tuberculous families are by no means as discrete and separate as our facilities for dealing with them.