

SICKNESS AND THE DEPRESSION¹

A PRELIMINARY REPORT UPON A SURVEY OF WAGE-EARNING
FAMILIES IN BALTIMORE, CLEVELAND, AND SYRACUSE

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PRELIMINARY data of an inquiry into the prevalence of sickness as related to changes in income and standards of living during the economic depression were given in a previous report². In that report data were presented for sample populations in Birmingham, Detroit, and Pittsburgh. This paper presents a similar preliminary analysis of the results of the survey in three other cities—Baltimore, Cleveland, and Syracuse. The reader is referred to the first paper for details as to the method and scope of the survey. Briefly, it consisted of a house-to-house canvass of some 12,000 white families in the poorer districts of eight large cities, one group of coal-mining communities, and a group of cotton-mill villages. The records obtained by the canvasses included (a) the economic history of the family in sufficient detail for computing family income for each year from 1929 to 1932, and (b) a record of all illness during the three months immediately preceding the date of the enumerator's visit, in the spring of 1933, with the extent of disability and of medical care for each case.

The sample population in Baltimore, Cleveland, and Syracuse comprised 13,077 individuals in 2,906 families for which the data were sufficiently complete for computing the actual income for each of the four years from 1929 to 1932. The popu-

¹From the Office of Statistical Investigations, United States Public Health Service, and the Division of Research, Milbank Memorial Fund.

²Perrott, G. St. J., and Collins, Selwyn D.: *Sickness and the Depression*, Milbank Memorial Fund *Quarterly Bulletin*, Vol. XI, No. 4, October, 1933, pp. 281-298; also *Public Health Reports*, United States Public Health Service, October 13, 1933, pp. 1251-1264.

lation did not differ greatly from that of the previous three cities as to occupational composition or nativity and racial stock. Its economic status was somewhat lower than that of the former group, as judged by per capita income in 1932.

ILLNESS AND 1932 INCOME

In Table 1 and Figure 1 the incidence of illness is shown for four groups of the surveyed population classified according to annual per capita income in 1932 to show the relation between economic status and illness as it was found in 1933. Inspection of the table and graph shows a lower illness rate for the higher income groups for illnesses with onset within the survey period. Illnesses with onset prior to the survey period show no relation to income. For illnesses beginning within the survey period, the disabling case rate in the lowest income group (under \$150), which comprises 49 per cent of the sample population, is 27 per cent higher and the bed case rate 37 per cent higher than in the group having an annual per capita income of \$425 or over. These results are in agreement with those of the surveyed group in Birmingham, Detroit, and

Table 1. Illness and 1932 income. Incidence of illness as related to 1932 family income per capita in canvassed white families in Baltimore, Cleveland, and Syracuse. The group comprised 2,906 families, including 13,077 individuals.

ANNUAL FAMILY INCOME PER CAPITA IN 1932	ILLNESS RATE PER 1,000 PERSONS FOR 3-MONTH SURVEY PERIOD ¹						POPULATION OBSERVED
	Onset Within Period			Onset Prior to Period			
	Total	Dis- abling	Bed	Total	Dis- abling	Bed	
Under \$150	173	103	85	97	47	30	6,424
\$150-\$249	147	85	70	98	45	28	3,048
\$250-\$424	156	76	61	92	42	25	2,457
\$425 and over	155	81	62	105	48	27	1,148

¹The survey period refers to the three months prior to the enumerator's visit. The canvass in each city required from three to four weeks. The dates of the canvass were slightly different in each city but were between April 1 and May 15 for all three cities.

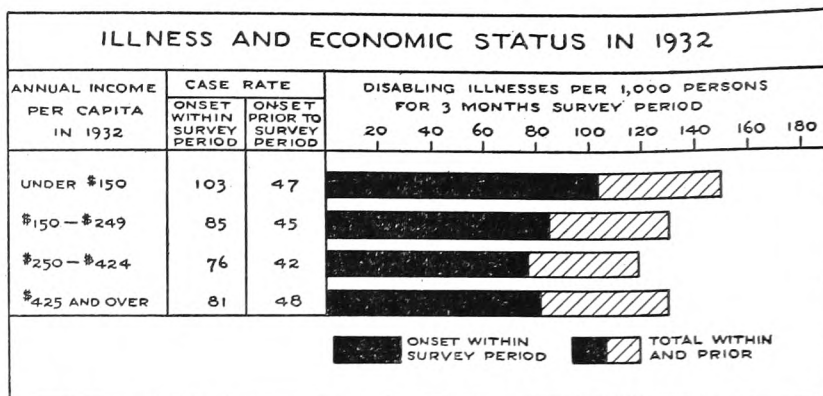


Fig. 1. Disabling illness during a three-month period in the early spring of 1933 in wage-earning families classified according to income per capita in 1932 in Baltimore, Cleveland, and Syracuse.

Pittsburgh and again show that the poor in 1932 are subject to more illness than their more fortunate neighbors in relatively comfortable circumstances.

ILLNESS AND INCOME CHANGE

In the following analysis the individuals have been divided, as in the previous report, into six categories according to economic status in 1929 and 1932.

- I. Individuals experiencing lowered family income per capita between 1929 and 1932 were classified as:
 1. Comfortable in 1929 and poor in 1932;
 2. Moderate in 1929 and poor in 1932;
 3. Comfortable in 1929 and moderate in 1932.
- II. Individuals who had not experienced lowered family income between 1929 and 1932 were classified as:
 1. Comfortable in 1929 and 1932;
 2. Moderate in 1929 and 1932;
 3. Poor in 1929 and 1932.

The results are given in Table 2 and Figure 2, where it is seen that the highest illness rate was experienced by individuals whose fortunes had suffered the greatest change, namely

the group classified as comfortable in 1929 but poor in 1932. This group, with a rate of 130 per 1,000, showed an incidence of disabling illness 60 per cent higher than the rate (81 per 1,000) of their more fortunate neighbors who were equal in status in 1929 but suffered no drop in income by 1932, that is, the "comfortable in 1929 and 1932" group. The group which dropped from moderate to poor showed a rate of disabling illness 18 per cent higher than the moderate group which experienced no drop in income. The group which dropped from comfortable to moderate shows about the same illness rate as the group which had been in comfortable circumstances throughout the four years. It is interesting to note that the group which might be called the "chronic poor," that is, "poor

Table 2. Illness and change in economic status, Baltimore, Cleveland, and Syracuse, 1929-1932.

DEPRESSION HISTORY ¹		CASE RATE PER 1,000 PERSONS FOR 3-MONTH SURVEY PERIOD						POPULATION OBSERVED
		Onset Within Period			Onset Prior to Period			
1929	1932	Total	Dis- abling	Bed	Total	Dis- abling	Bed	
I. INDIVIDUALS WITH DIMINISHED INCOME 1929-1932								
Comfortable	Poor	210	130	92	137	70	38	1,104
Moderate	Poor	168	93	78	88	39	26	3,653
Comfortable	Moderate	151	80	64	105	49	31	2,350
II. INDIVIDUALS WITH UNCHANGED INCOME 1929-1932								
Comfortable	Comfortable	157	81	61	103	45	24	1,069
Moderate	Moderate	149	79	66	88	40	24	3,000
Poor	Poor	158	107	95	90	49	34	1,667

¹Comfortable = \$425 and over per capita per year.

Moderate = \$150-\$424 per capita per year.

Poor = Under \$150 per capita per year.

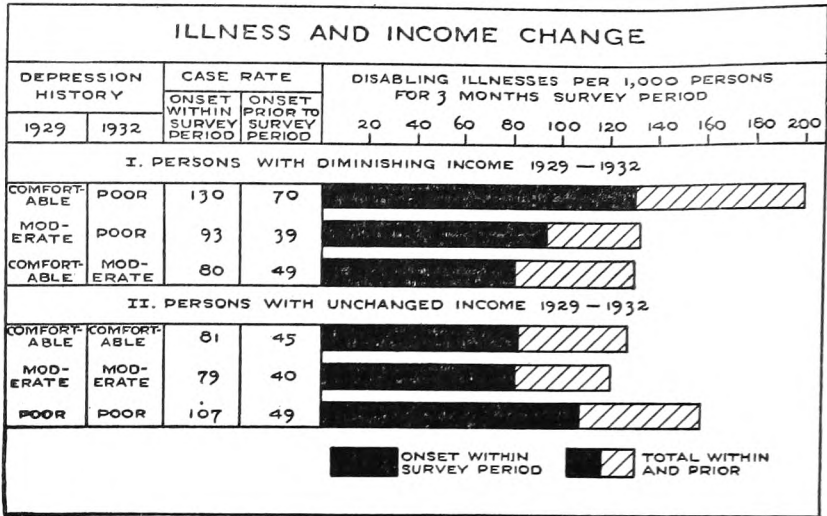


Fig. 2. Disabling illness during a three-month period in the early spring of 1933 in wage-earning families classified according to change in per capita income, in Baltimore, Cleveland, and Syracuse, 1929-1932.

Comfortable=\$425 and over per capita per year.

Moderate=\$150-\$424 per capita per year.

Poor=Under \$150 per capita per year.

in 1929 and 1932," showed a lower disabling illness rate (107 per 1,000) than the group which had dropped from comfortable to poor during the depression (130 per 1,000).

These results are in accord with those of the surveyed group in Birmingham, Detroit, and Pittsburgh, namely, that a relatively severe drop in economic status appears to be associated with a high illness rate. The results are generally true for the surveyed group in each of the cities as well as for the total of the six cities.

ILLNESS AND UNEMPLOYMENT

In Table 3 and Figure 3 is shown the relation between unemployment and illness. The surveyed population has been divided into three groups of families having (1) no employed workers, (2) one or more part-time workers but no full-time workers, (3) one or more full-time workers with or without part-time workers. The disabling illness rate among families

EMPLOYED WORKERS IN THE FAMILY	CASE RATE PER 1,000 PERSONS FOR 3-MONTH SURVEY PERIOD						POPULATION OBSERVED
	Onset Within Period			Onset Prior to Period			
	Total	Dis- abling	Bed	Total	Dis- abling	Bed	
No employed workers	208	126	103	116	64	39	1,786
Part-time workers (1 or more; no full-time)	171	99	84	104	45	30	5,107
Full-time workers (1 or more; 0 or more part-time)	141	76	62	85	41	24	1,846

Table 3. Illness and unemployment, Baltimore, Cleveland, and Syracuse.

having no employed workers (126 per 1,000) is 66 per cent higher than among families having full-time workers (76 per 1,000) and 27 per cent higher than the illness rate in households having part-time workers (99 per 1,000). The group with no employed workers has a higher disabling illness rate (126 per 1,000) than the group with annual per capita income under \$150 (103 per 1,000). These results are in agreement with the data previously reported for Birmingham, Detroit, and Pittsburgh.

SUMMARY

Further preliminary analysis of the data of the sickness survey described in the October issue of the *Quarterly Bulletin* has confirmed the results of that report. The present paper gives results of the survey in three additional cities—Baltimore, Cleveland, and Syracuse. Again, it is found that a large drop in economic status is associated with a high rate of illness. These families of the “depression poor” show a rate of disabling illness 60 per cent higher than that of their more fortunate neighbors who suffered no material loss of income from 1929 to 1932, and 22 per cent higher than the rate among

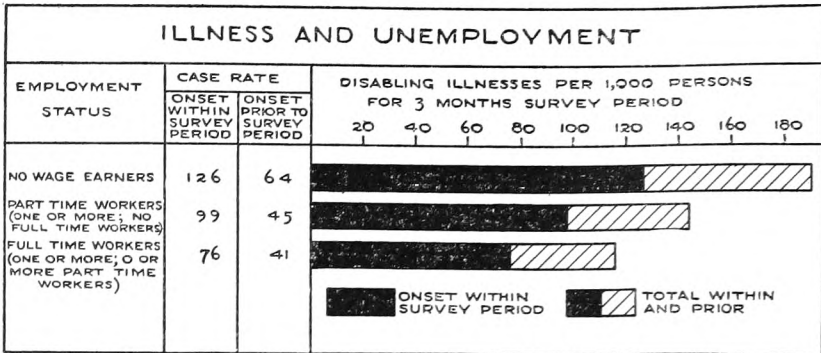


Fig. 3. Disabling illness during a three-month period in the early spring of 1933 in families classified according to the employment of wage-earning members, in Baltimore, Cleveland, and Syracuse.

families of the "chronic poor" who were in a condition of poverty even in 1929. Families of the unemployed have a disabling illness rate 66 per cent higher than families having full-time workers.

It may be noted, moreover, that since illnesses beginning *within* the survey period in the late spring of 1933 are correlated with economic and employment status in 1932 and with changes in economic status during 1929-1932, the possibility that ill health was an important cause of unemployment and thus of lowered income is almost, if not entirely, excluded. In fact, the record of unemployment due to sickness showed that such unemployment was not correlated with changes in economic status.

While discussion of the broad implications of the results must await further study, it can be said that none of the beneficent effects often attributed to the economic depression are evidenced by the data. On the contrary, illness has been most frequent among those who have had to "tighten their belts" most. Final conclusions are reserved until complete analysis of the data has been made, including study of the nature of the illnesses involved, the relative effects at different ages, and a more detailed analysis of the family economic history.