

# *Aid to the Permanently and Totally Disabled: Recipients With Heart Disease*

by CHARLES E. HAWKINS \*

*In mid-1951 the Bureau of Public Assistance, in cooperation with State public assistance agencies, made a survey to obtain information on the social and medical characteristics of the men and women receiving aid to the permanently and totally disabled. The following article analyzes the findings with respect to recipients with a disease of the heart; it is the first of several articles based on the study.*

**A**MONG needy permanently and totally disabled persons receiving aid in the early summer of 1951, diseases of the heart were found more frequently than any other group of diseases or impairments. One-fourth of the recipients of this type of aid had a disease of the heart reported as the sole or major impairment resulting in permanent and total disability. Because of the widespread interest in heart disease and because of its prevalence in this group of recipients of public assistance, the article is focused on the characteristics of only those recipients for whom a disease of the heart was found to constitute the major impairment.

The Federal-State program of aid to the permanently and totally disabled was inaugurated in October 1950, under the 1950 amendments to the Social Security Act. Previously, there had been relatively little experience with programs limited to persons whose disabilities were both total and permanent. A Statewide program for such persons had operated for a number of years in Wisconsin, and a few counties or cities in other States had similar programs. In some States the general assistance programs were so limited in scope that eligibility for aid was virtually synonymous with permanent and total disability. A few of these programs were, in fact, designated as aid for handicapped or disabled persons.

There were in many States, among the recipients of general assistance, sizable numbers of persons who were

severely disabled; there were also incapacitated parents in families receiving aid to dependent children whose disabilities were permanent and total and whose needs were not met by the payments under that program. As States developed programs of aid to the permanently and totally disabled, persons who had been receiving general assistance or aid to dependent children and who met eligibility requirements for the new program were transferred to it. Such persons comprised a large part of all recipients under this program during its early months of operation. Disabled recipients who were in receipt of aid to the needy blind and the disabled aged who were receiving old-age assistance were not usually transferred to the new program.

## *Method of Study*

From the beginning of the program it was planned to collect data on the social and medical characteristics of recipients of aid. Under the State plans for aid to the permanently and totally disabled, the determination that a disability of permanent and total character did or did not exist had to be made by a physician and a trained social worker acting on behalf of the State agency.<sup>1</sup> This procedure ensured that there were carefully recorded and evaluated medical as well as social data for each recipient of aid.

By early 1951 it was apparent that the collection of data on the characteristics of recipients could be accomplished better by a sample study

of a cross section of recipients in a given month than by data obtained as the recipients were added to the rolls. Accordingly, a study was undertaken,<sup>2</sup> with each State that had a program in operation choosing either May or June 1951 as the month in which a representative sample of recipients would be studied. Thirty States had programs in operation at the time of the study, and the total number of recipients was between 90,000 and 100,000.

The sample represented a different proportion of the caseload in the various States; the State proportion was determined by the relationship of the number of recipients in the State to the number needed in the sample to provide reasonably valid detail on the characteristics of the recipients. In 17 States the number of recipients was large enough to provide a sample that warranted tabulation. In the other 13 States this was not the case, and the small numbers of recipients scheduled appear only in the national totals. The recipients in the samples in the 30 States totaled 13,200, representing 93,359 recipients. Two States, Michigan and Wisconsin, chose to include all their recipients. In each of the other 28 States the number of recipients included in the sample was inflated to represent the total number of recipients in the State before national totals were prepared.

Obviously, the prevalence of a disease among recipients of aid to the permanently and totally disabled is not of necessity closely related to the prevalence of the same disease or condition among the general population. By the nature of the assistance program, recipients of aid must be in need and must have a permanent impairment that substantially precludes them from engaging in any useful occupation. Thus the recipients with

\* Division of Program Statistics and Analysis, Bureau of Public Assistance.

<sup>1</sup>In a few States that accepted only persons who were completely helpless, medical certification alone was used.

<sup>2</sup>See *Characteristics of Recipients of Aid to the Permanently and Totally Disabled, Mid-1951* (Public Assistance Report No. 22), April 1953.

whom this article is concerned had a disease of the heart that resulted in severe disability, had insufficient resources to support themselves, and had no one on whom they could depend for support. These qualifications are certainly not applicable to all persons in the population with heart disease, and their application may result in quite different distributions of age, sex, and diagnosis from what would be obtained from a random sample of all persons who have heart disease.

### Findings

Heart disease was the major impairment of 2,946 recipients in the State samples, representing 23,809 or 25.5 percent of all recipients of aid to the permanently and totally disabled. The total excludes more than 5,200 recipients for whom a diagnosis of heart disease was reported as a secondary impairment but not as the major impairment. It also excludes diseases of the vascular and nervous systems, frequently associated with heart disease, where there was no diagnosed disease of the heart itself.

In this latter group were hypertension without mention of heart involvement, which was the major impairment for 3.8 percent of all recipients; general arteriosclerosis, which was the major impairment for 1.0 percent; and cerebral paralysis, which was the major impairment for 6.6 percent and which probably resulted in most instances from vascular accidents. If these impairments were considered in conjunction with

diseases of the heart, the combined total would represent 37 percent of the major impairments of recipients as compared with the 25.5 percent accounted for by diseases of the heart alone.

The study findings provide no data regarding recipients with heart disease of syphilitic origin except the negative information that their number is relatively small. When a syphilitic etiology was established or presumed, the impairment was classified as a late effect of syphilis rather than as a separate disease or condition. The total number of recipients with syphilis and its sequelae was not large enough to warrant further analysis, and the recipients with syphilitic heart disease as their major impairment are accordingly excluded from this analysis.

Thyrotoxic heart disease and congenital heart disease are also excluded because neither of these conditions was reported in a significant number of cases.

*Classification.*—In classifying the medical diagnoses reported in the study, the *International Statistical Classification of Diseases, Injuries, and Causes of Death, 1948* was used. Persons coding the diagnoses were trained under a program that had been worked out with the Morbidity and Health Statistics Branch, Division of Public Health Methods, of the Public Health Service. Diseases of the heart, as described here, refer to codes 400–443 of the international list. For purposes of presentation and to secure groups sufficiently large

to permit analysis, these codes have been combined into five broad classes. These classes are designated as chronic rheumatic heart disease (codes 400–416), arteriosclerotic heart disease (code 420), chronic endocarditis and other myocardial degeneration (codes 421 and 422), hypertension with heart disease (codes 440–443), and the remaining codes (430–434) grouped in a class designated as “other” diseases of the heart.

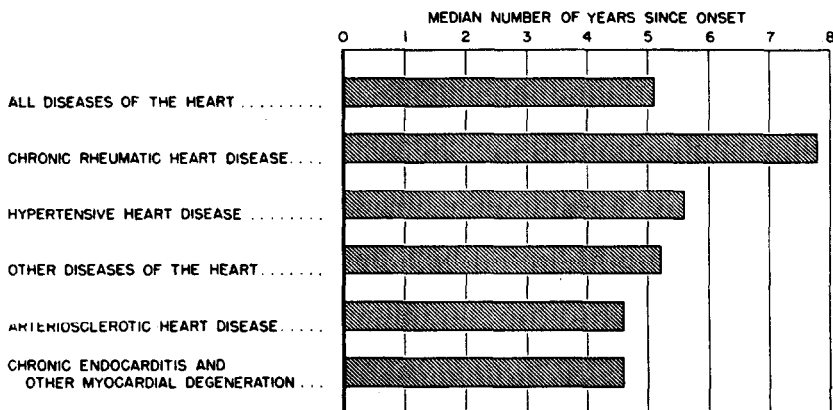
Of these five classes, hypertension with heart disease was the largest, accounting for almost half (49.3 percent) of all recipients who had any disease of the heart as their major impairment. Most of them (41.3 percent of all recipients with heart disease) were classified under hypertension (unspecified type) with heart disease, while 4.1 percent had hypertensive heart disease with arteriolar nephrosclerosis, and 3.9 percent had hypertension (specified type) with heart disease.

The second largest class was arteriosclerotic heart disease, which included 27.3 percent of all recipients with heart disease. Third in numerical importance was chronic rheumatic heart disease, which accounted for the major impairment of 8.8 percent of the group. In this class, only two types of heart disease occurred frequently—diseases of the mitral valve, and chronic rheumatic heart disease of unspecified type. These classes included 4.0 and 3.4 percent, respectively, of the recipients with any type of heart disease as a major impairment.

The class including chronic endocarditis and other myocardial degeneration ranked fourth and accounted for 8.1 percent of the total, with 2.1 percent originally classified as chronic endocarditis (not specified as rheumatic) and 6.0 percent as other myocardial degeneration. The fifth class, designated as other diseases of the heart, represented 6.5 percent of the group and consisted primarily of such conditions as congestive heart failure, cardiac asthma, and cardiac decompensation.

Most of the recipients with heart disease as a major impairment also had other diagnosed impairments. Nearly two-thirds of the group had at least one other impairment. While these diseases and impairments were

Chart 1.—Median number of years since onset of diseases of the heart among recipients of aid to the permanently and totally disabled, by type of disease, mid-1951



broadly distributed among practically all possible classifications, the most frequent was arthritis, which was reported as the secondary impairment for 13.1 percent of the group.

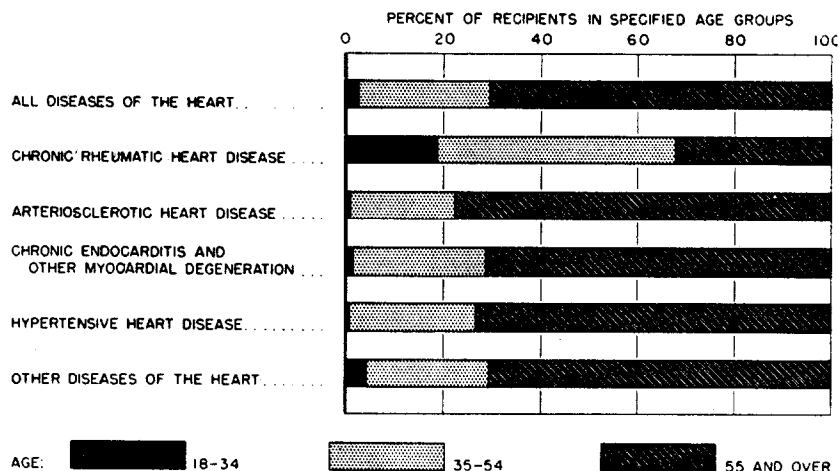
**Duration of disease.**—The length of time since the onset of the impairment was established for 93.6 percent of the recipients with a disease of the heart. It is probable that the group for whom the impairment's duration could not be determined would increase the number of recipients in the longer time intervals and would increase the median time elapsed since the onset of the disease. The impairment had begun within the year for only 3.4 percent of the recipients. For the largest group, 30.0 percent, the impairment had started 2, 3, or 4 years previously; for 22.0 percent it had lasted 10 or more years.

The median length of time since onset varied for different diseases of the heart (chart 1). The percentage of recipients who had had a disease of the heart for 10 years or longer varied with the different types of the disease. Of those with chronic rheumatic heart disease, 37.0 percent were in the "10 or more years" classification; for the other four types of heart disease the percentages ranged from 17.0 to 22.2.

**Mobility of recipients.**—Of the recipients with diseases of the heart, 13.8 percent were confined to their homes or other places of abode (table 1); 21 percent of all recipients of aid to the permanently and totally disabled were similarly handicapped. Recipients with chronic rheumatic heart disease were confined to their homes most often, and those with hypertensive heart disease least often.

The recipients capable of activity outside their own homes accounted for 86.2 percent of the total with heart disease as their major impairment. This group included some who needed the help of another person and others who used a cane, crutch, or other device in order to get about. More than three-fourths required no help in activities outside their homes. A larger percentage of the recipients with hypertensive heart disease than of those with other types of heart disease were able to engage in activity outside their homes, but proportionately more of them required the serv-

Chart 2.—Age distribution of recipients of aid to the permanently and totally disabled with diseases of the heart, by diagnosis, mid-1951



ices of another person or used a device in moving about.

Services in connection with the essential activities of daily living were required by 14.0 percent of the recipients with heart disease. Such services included help in eating, dressing, getting about, and maintaining bodily hygiene and in activities affecting personal safety. Recipients with different diseases of the heart needed services in about the same proportions. While the percentage of recipients with hypertensive heart disease who needed no service was slightly larger than that of recipients with any other type of heart disease, services in activities affecting personal safety were needed somewhat more frequently by the recipients with hypertensive heart disease.

**Age of recipients.**—Almost 71 percent of the recipients with a disease of the heart were aged 55 or over. Most of them were in the age bracket 55-64; 26.9 percent were aged 35-54, and 2.4 percent were aged 18-34. To be eligible for aid to the permanently and totally disabled, recipients must be at least age 18; very few persons receiving this type of aid are aged 65 or over because most older persons qualify for old-age assistance.

Slightly more than half the recipients with heart disease who were aged 55 and over were classified as having hypertensive heart disease, and almost one-third had arteriosclerotic heart disease. Somewhat less than half of those aged 35-54 had

hypertensive heart disease, fewer than a fourth had arteriosclerotic heart disease, and almost one-sixth had chronic rheumatic heart disease. Of the group under age 35, about two-thirds had chronic rheumatic heart disease. The age distribution of recipients with chronic rheumatic heart disease differed markedly from the distributions for recipients with other types of heart disease (chart 2). The frequency of chronic rheumatic heart disease among recipients under age 35, coupled with the substantial percentage (37) of the recipients with this disease who had been disabled for 10 or more years, strongly suggests that in many instances the present recipients are persons who developed the disease in childhood.

**Sex.**—Among all recipients of aid to the permanently and totally disabled, the numbers of men and women were almost equal. Of those with a disease of the heart as their major impairment, however, men accounted for 43.3 percent and women for 56.7 percent.<sup>3</sup>

The proportions differed substantially with the types of heart disease. For three groups—those with arteriosclerotic heart disease, other diseases

<sup>3</sup> The National Health Survey in 1935-36 also found higher morbidity rates among women than among men from both heart disease and hypertension. See Selwyn D. Collins, "Illness from Heart and Other Cardiovascular-renal Diseases in General Morbidity Surveys of Families," *Public Health Reports*, Reprint No. 2978, p. 21.

**Table 1.—Mobility of recipients of aid to the permanently and totally disabled with diseases of the heart**

Disease of the heart	Total	Confined to home				Capable of activity outside home			
		Total	Bed-ridden	Chair-fast	Other	Total	With help of		Without help
							Another person	A device	
Total.....	100.0	13.8	3.5	2.3	8.0	86.2	5.4	3.1	77.7
Chronic rheumatic heart disease.....	100.0	20.8	6.2	3.2	11.3	79.2	4.2	2.4	72.7
Arteriosclerotic heart disease.....	100.0	14.7	3.1	2.0	9.6	85.3	5.7	2.4	77.2
Chronic endocarditis and other myocardial degeneration.....	100.0	15.9	4.8	3.7	7.3	84.1	3.3	2.4	78.4
Hypertensive heart disease.....	100.0	11.4	2.4	2.2	6.8	88.6	5.9	3.9	78.8
Other diseases of the heart.....	100.0	17.0	8.1	1.5	7.4	83.0	4.3	2.0	76.8

of the heart, and endocarditis and other myocardial degeneration—men outnumbered women about 5 to 4. For those in the other two classifications—chronic rheumatic heart disease and hypertensive heart disease—women outnumbered men. The difference was particularly marked in the latter classification, where the ratio of women to men was more than 2 to 1. Age differences between the men and women were not striking. Slightly higher proportions of men than of women were found in the ages under 35 and 55 or over, and a larger percentage of women than of men were in the ages 35–54.

**Race.**—Nonwhite recipients of aid to the permanently and totally disabled were found proportionately more often than white recipients in the groups with a disease of the heart as their major impairment.<sup>4</sup> About 3 out of 10 of all recipients were nonwhite; 4 out of 10 of those with a disease of the heart were nonwhite. The heavier representation of nonwhite recipients occurs chiefly in the hypertensive heart disease category, where they account for more than half the total, and to a lesser extent in the group with chronic endocarditis or other myocardial degeneration, where they accounted for more than one-third of the total. Nonwhite recipients were underrepresented in the other three heart dis-

<sup>4</sup> The age-adjusted death rate from all forms of heart disease is higher for nonwhite than for white persons. See Maryland Y. Pennell and Josephine L. Lehmann, "Mortality From Heart Disease Among Negroes as Compared With White Persons," *Public Health Reports*, Reprint No. 3064, p. 1.

ease categories, accounting for only one-fourth of the recipients with chronic rheumatic heart disease, one-fourth of those with arteriosclerotic heart disease, and less than one-fourth of those with other diseases of the heart.

Nonwhite recipients with heart disease were found in smaller proportions than white recipients in the ages under 35 and at ages 55 and over. On the other hand, almost twice as many of the nonwhite recipients as of the white recipients were found in the age bracket 35–54. The extent to which the greater frequency of nonwhite recipients in this age group is influenced by the somewhat lower life expectancy of the nonwhite population is not known.

**Employment history.**—Recipients with diseases of the heart as their major impairment had worked in regular paid employment in somewhat larger proportions than had all recipients. This finding is consistent with the concentration of these recipients in the higher age brackets and with the overrepresentation of nonwhite recipients, since larger proportions of both older recipients and nonwhite recipients were found to have had employment. It is not entirely consistent, however, with the larger percentage of women than of men among the recipients with heart disease because among all recipients relatively fewer women were found to have had employment.

Whatever the reason may be, recipients with heart disease constituted 25.5 percent of all recipients of aid but made up 29.0 percent of the recipients with a history of paid employment. When corresponding per-

centages are compared for each of the five types of heart disease, it is apparent that recipients with heart disease, regardless of type, had histories of paid employment somewhat more frequently than recipients with other disabilities.

**State variations.**—The proportion of recipients of aid to the permanently and totally disabled with heart disease varied widely among the States, accounting for the major impairments of 36.7 percent of all recipients in Louisiana but for only 4.4 percent of those in Michigan and 3.4 percent in Wisconsin. State differences result primarily from differences in their definitions of permanent and total disability and are only secondarily affected by differences in the prevalence of heart disease in the States.

The two States that had small percentages of recipients with heart disease as a major impairment had small programs, and both were States in which most of these recipients were confined to their homes. In each there was only a small proportion of recipients of aid to the permanently and totally disabled who were capable of activity outside their own homes. Since for all States most recipients with heart disease were able to get around outside their homes, it is not surprising that the number of such recipients in these two States is relatively small. The States that had high percentages of recipients with heart disease as their major impairment were generally States that had adopted relatively broad definitions of total disability and had somewhat larger proportions of the total population receiving aid. In the 30 States operating programs, 25.5 percent of the recipients had heart disease. Of the 17 States with enough recipients to warrant an examination of detail, five had more than the average percentage of recipients with heart disease. Louisiana, New York, and Pennsylvania were among these five; together they had more than half of all the recipients of aid to the permanently and totally disabled in the Nation at the time the study was made. There were, in addition to Wisconsin and Michigan, 10 States in which the proportions were below the national

average; in these 10, the range was 15-24 percent.

### Summary

Data from the sample study of recipients of aid to the permanently and totally disabled show that for all States combined some form of heart disease is the most frequent major impairment and is the most important element in the disability of about one-fourth of all recipients. Among the States the percentage of recipients with a disease of the heart varies widely—from 3.4 percent to 36.7 percent. Of all diseases of the heart, hypertensive heart disease was the most frequently reported, ac-

counting for about half the total. Arteriosclerotic heart disease ranked second and was the major impairment of more than one-fourth of the recipients with heart disease.

Recipients with heart disease as a major impairment usually had other diagnosed impairments. The median length of time since the onset of heart disease was 5.1 years. Only 14 percent of the recipients were confined to their homes. A similar percentage needed help in one or more essential activities of daily living, such as eating or dressing.

About 70 percent of the group were aged 55 or over; most of them were between the ages of 55 and 64. Recip-

ients with chronic rheumatic heart disease, however, tended to be younger than the recipients with other types of the disease.

Heart disease was more common among women than among men receiving aid to the permanently and totally disabled, and more common among nonwhite than among white recipients. More of the recipients with heart disease than of those with other disabilities had a history of employment. In comparison with all other recipients, those with heart disease were generally older, less severely limited in their daily activities, and included larger percentages of women and of nonwhite recipients.

## Recent Publications\*

### Social Security Administration

BUREAU OF PUBLIC ASSISTANCE. *Characteristics of Recipients of Aid to the Permanently and Totally Disabled, Mid-1951.* (Public Assistance Report No. 22.) Washington: The Bureau, Apr. 1953. 99 pp. Processed.

Findings from a study of the social and medical characteristics of recipients of aid to the permanently and totally disabled. Limited free distribution; apply to the Bureau of Public Assistance, Social Security Administration, Washington 25, D. C.

BUREAU OF PUBLIC ASSISTANCE. *Characteristics of State Public Assistance Plans under the Social Security Act . . .* (Public Assistance Report No. 21.) Washington: U. S. Govt. Print. Off., 1953. Looseleaf. 55 cents.

CHILDREN'S BUREAU. *Recommended Standards for Services for Delinquent Children.* Washington: The Bureau, 1953. 21 pp. Processed. Limited free distribution; apply to the Children's Bureau, Social Security Administration, Washington 25, D. C.

CHILDREN'S BUREAU. *Some Facts about Juvenile Delinquency.* (Bureau

Publication No. 340.) Washington: U. S. Govt. Print. Off., 1953. 17 pp. 10 cents.

CHILDREN'S BUREAU. *What's Happening to Delinquent Children in Your Town?* (Bureau Publication No. 342.) Washington: U. S. Govt. Print. Off., 1953. 26 pp. 15 cents. Designed as a guide for securing facts about the community agencies serving delinquent children.

RICE, CARL E. *Determination of Permanent and Total Disability and Provision of Necessary Services for Persons Who May Have Mental Disorders.* (Public Assistance Report No. 23.) Washington: Bureau of Public Assistance, Apr. 1953. 20 pp. Processed.

Defines major mental disorders and interprets the concepts of permanence of impairment and total disability, considers the role of public assistance in rehabilitation, and outlines suggested procedures for obtaining data and evaluating applications. Limited free distribution; apply to the Bureau of Public Assistance, Social Security Administration, Washington 25, D. C.

### General

COLM, GERHARD, and YOUNG, MARILYN. *The American Economy in 1960: Economic Progress in a World of Tension.* (Planning Pamphlets No. 81.) Washington: National Planning Association, Dec. 1952. 166 pp. \$2.

"Extension of Social Insurance for Seafarers in Chile." *Industry and*

*Labour*, Geneva, Vol. 9, Apr. 1, 1953, pp. 217-218. 25 cents.

ILSE, LOUISE WOLTERS. *Group Insurance and Employee Retirement Plans.* New York: Prentice-Hall, Inc., 1953. 438 pp. \$7.50.

Includes chapters on the social and economic background of group insurance; statutory development and government regulations; characteristics; cost; State and Federal sickness disability systems; group hospital, surgical, and medical expense insurance; group annuities; and evaluation of the group insurance movement.

LAROQUE, PIERRE. "Tendencies of Social Security Legislation in the Countries Which Signed the Brussels Pact." *Bulletin of the International Social Security Association*, Geneva, Feb. 1953, pp. 3-25. \$2.50 a year.

NEW ENGLAND GOVERNORS' COMMITTEE ON THE TEXTILE INDUSTRY. Seymour E. Harris, Chairman. *Report on the New England Textile Industry.* Cambridge, Mass.: The Committee, 1953. 317 pp. \$2.

"Social Security for Non-Agricultural Workers in Algeria." *Industry and Labour*, Geneva, Vol. 9, Apr. 1, 1953, pp. 213-217. 25 cents.

U. S. CONGRESS. SENATE. COMMITTEE ON GOVERNMENT OPERATIONS. *Creation of Commissions to Study Federal Reorganizations, and Federal-State Relations. Hearings . . . 83d Congress, 1st Session.* Washington: U. S. Govt. Print. Off., 1953. 89 pp.

### Retirement and Old Age

CANTOR, LEON R. "Cooperation of the Jewish Community Center and  
(Continued on page 20)

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