

# Screening for Hypertension in Washington, D.C., 1971

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HYPERTENSION has ranked high among the four most frequently observed abnormalities in the District of Columbia's multiphasic screening program (1). Consequently, the Community Health and Hospitals Administration, Department of Human Resources, conducted a followup of all 13,399 persons who were screened for hypertension during 1971.

## Methods

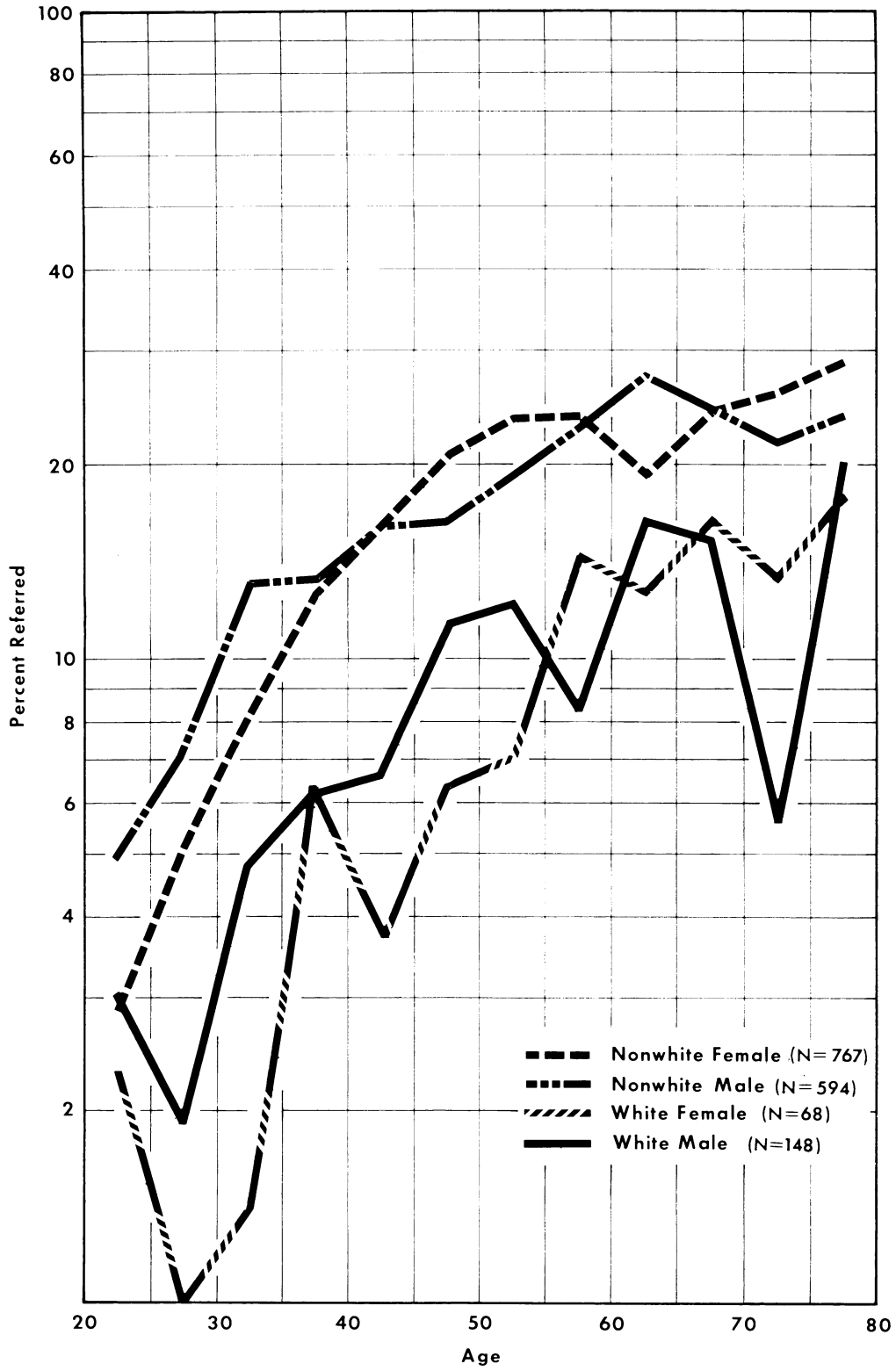
The multiphasic screening program operates two units, one located permanently in a neighborhood health center and the other in a mobile trailer which covers various areas of the city.

Measurement of blood pressure is a standard test, and it is always performed by a trained technician. For the purpose of this program, readings of up to 140/90 mm Hg for persons aged 21-39 and up to 160/95 mm Hg for persons 40 and over are considered to be within normal limits.

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Percentage of screenees with abnormal blood pressure referred for evaluation, Washington, D.C., 1971



Screenees with blood pressures equal to or above these ranges are referred to a medical facility or their private physicians for further evaluation. All persons requesting services are accepted if they are age 21 or over, regardless of income or residence.

A field followup team assures that every screenee referred is seen by a physician, that a diagnosis and a management decision are made, and finally that a disposition report is filed by the attending physician with the multiphasic screening program.

## Results and Discussion

Of the 13,399 person screened for hypertension, 1,925 or 14.4 percent had abnormal readings. However, only 1,594 or 11.9 percent were referred for evaluation. The distribution of the screenees according to the results of testing was as follows.

| Results                                   | Screenees |         |
|---|-----------|---------|
|   | Number    | Percent |
| Total screened                            | 13,399    | 100.0   |
| Normal                                    | 11,474    | 85.6    |
| Abnormal                                  | 1,925     | 14.4    |
| Referred                                  | 1,594     | 11.9    |
| Condition unknown by screenee             | 1,018     | 7.6     |
| Condition known by screenee               | 576       | 4.3     |
| Not referred (already under medical care) | 331       | 2.5     |

The distribution of the screenees by race and sex (excluding 101 for whom race or sex, or both, was not reported) was as follows.

| Race and sex     | Number screened | Referred |         |
|------------------|-----------------|----------|---------|
|                  |                 | Number   | Percent |
| White males      | 1,833           | 148      | 8.1     |
| White females    | 917             | 68       | 7.4     |
| Nonwhite males   | 4,525           | 594      | 13.1    |
| Nonwhite females | 6,023           | 767      | 12.7    |

Age-specific rates of referrals by race and sex showed that nonwhites had higher rates than whites and that nonwhite females aged 40 to 60 years had higher rates than the other three groups of persons in the same age group, as shown in the chart. Concerning place of residence, no statistically significant differences were seen between city and noncity or suburban residents.

The program received physicians' evaluations for 1,450 patients or 91 percent of the total referred. Evaluations for 115 or 7.2 percent were not completed for various reasons including death, moving out of the metropolitan area, and lack of cooperation. Only 29 persons referred or 1.8 percent were not accounted for because no

evaluation was received from the physicians to whom they had been referred.

Initial screening impressions were confirmed by the attending physicians for 92 percent of the patients, and 56.4 percent of these patients were not previously known by the physicians to have hypertension.

The final medical evaluations showed a total of 1,282 diagnoses of hypertensive disease and 125 diagnoses of hypertensive heart disease. At the time of reporting by the physicians, 11.8 percent of the patients were already receiving treatment, 87.2 percent were placed under medical care, and 1 percent were not placed under medical care.

The group of people screened in Washington, D.C., during 1971 is by no means a randomized sample of the city's population. Rather, it is a large group of city dwellers (80 percent of the total screened) and nonwhite persons (79.3 percent of the total and 90.2 percent of the city residents screened). Nonwhite females represented the largest single group (45 percent of the total).

The screenees were apparently in good health at the time of testing, although 4.3 percent mentioned abnormal blood pressure when asked about their previous illnesses.

Despite all the statistical shortcomings inherent in the study of any group similar to this one, the general profile of the curve of referrals shown in the chart closely correlates with that presented in "Percent of Adults with Definite Hypertension by Age, Race and Sex," as compiled from the Health Examination Survey (2), and the Chicago Industrial Program of 1967-1971 (3). Nevertheless, based on our results, it is estimated that in the District of Columbia about 65,000 persons aged 21 years and over have hypertension and that about 53,000 of these persons need to be placed under medical supervision.

## REFERENCES

- (1) Khoury, S. A.: Multiphasic screening in Washington, D.C., 1968 and 1969 results. *Health Services Rep* 87: 664-668, August-September 1972.
- (2) National Center for Health Statistics: Hypertension and hypertensive heart disease in adults. *United States 1960-1962*. PHS publication No. 1000, Ser. 11, No. 13. U.S. Government Printing Office, Washington, D.C., May 1966.
- (3) Schoenberger, J. A., Stamler, J., Shekelle, R. B., and Shekelle, S.: Current status of hypertension control in an industrial population. *JAMA* 222: 559-562, Oct. 30, 1972.