

diture group and income group. Of the estimated total family units 14 per cent had no expenditure; 59 per cent expenditures from \$1 to \$99; 18 per cent, from \$100–\$199; and 9 per cent, \$200 and over.

The second section shows that as family size increased, expenditures for health services increased. For example, only 4 per cent of one person families had expenditures of \$200–\$499, whereas 29 per cent of the families with five or more persons fell into that expenditure group. Thirty-seven per cent of the one person families had no health expenditures and only 2 per cent of the families with five or more persons had none.

The third section of the report shows that as income increased the proportion of families with high expenditures increased. For example, in families with incomes "under \$1,500" only 4 per cent had health expenditures of from \$200–\$499 whereas 17 per cent of the families with incomes of "\$5,000 and over" were in that expenditure group. Twenty per cent of the families with incomes "under \$1,500" had no expenditure whereas only 3 per cent of the families with incomes of "\$5,000 and over" had no expenditure. Each section of this third report gives data on expenditures by family units in a detailed breakdown by expenditure item.

These three preliminary reports are part of a series intended to provide interim information on the more important results of the Canadian Sickness Survey. They precede the publication of a final report which is to contain more detailed information together with a fuller description of the methods used. The Canadian Sickness Survey was a comprehensive morbidity survey on a national level which provided information "essential for the effective planning of both medical care and public health programs."

JANE COULTER MERTZ

• • •

EVALUATION OF THE PHYSICAL FITNESS OF PRESENT-DAY INDUCTEES¹

THE inadequacies of the method of distributing manpower among the various branches of the Armed Forces led the

¹ Karpinos, Bernard D.: Evaluation of the Physical Fitness of Present-Day Inductees. *U. S. Armed Forces Medical Journal*, March, 1953, IV, No. 3, pp. 415–430.

United States Army to adopt a new system of evaluating physical fitness of inductees. Although the need for a change in procedure was recognized at the outset of World War II, the present "profile" system was not adopted until 1944 when the critical shortage of men in the Army Ground Forces necessitated an immediate change. The PULHES system is essentially the same as the PULHEMS system which had previously been developed by the Canadian Army. It is designed to yield a "concise descriptive evaluation of a person's physical capacities from a functional . . . point of view . . ." This system replaced one in which occupational skill and intelligence alone determined placement. It was hoped that the new system would reduce the possibility of too many men of high physical fitness being assigned to noncombatant jobs where requirements for physical fitness were least stringent. Conversely, the new system was designed to reduce the possibility of too many men of low physical stamina being assigned to the combat duty and other heavy work of the Ground Force.

The separate factors of the PULHES system and some examples of what they cover are as follows: P—physical capacity or stamina (age, height, weight, muscular coordination); U—upper extremities (use of hands, arms, spine, range of motion); L—lower extremities (use of feet, legs, lower back); H—hearing; E—eyes; S—neuropsychiatric (emotional stability, personality and psychiatric history).

Each of the factors is graded from 1 to 4, with 1 representing above-average efficiency and 4 indicating capacities below minimum requirements. The profile serials are then grouped in four categories called A, B, C, and E. The physical categories of A, B, C, and E are defined as profiles in which the lowest ratings are 1, 2, 3, and 4, respectively. Thus a profile of C might be 211113.

The PULHES system differs from the PULHEMS, the one developed by the Canadian Army, in which the M or "mental status" is derived separately. The United States Armed Forces Qualification Tests (AFQT), given at the initial examinations of the inductee, contain questions on the meanings of words, arithmetic problems, and problems dealing with forms and patterns. The examinees are divided into five groups ranging

from very rapid learners (Group 1) to very slow learners who are unsuitable for military service (Group V).

The United States inductee is given a double classification, i.e., A-I (physical category A and mental group I). This separation of the mental and physical factors is important since different jobs require varying balances between physical and mental qualifications. Another advantage of the separation is that although physical requirements for the Army appear to have reached a stabilized level, intelligence requirements are relatively elastic. Also, the dual system facilitates identification of those who are physically but not mentally qualified.

A man's military occupational specialty is determined by his physical profile, the AFQT, and the Army Classification Battery. This last factor is a series of tests given at the Reception Center and measures specific aptitudes, knowledge, and skills.

The most important change in induction policies since World War II is with respect to those formerly classified as "limited service." This term has been replaced by physical category C but there are no restrictions to the induction of men in this category as there had been for "limited service" personnel.

Dr. Karpinos presents a distribution of inductees by jointly considered physical category and mental group for a recent period, August, 1950 through June, 1951. The largest proportion (28.1 per cent) is for the A-IV group. A and IV separately also have the largest total proportions with 75.6 per cent and 36.0 per cent, respectively.

As already noted, "physical categories" B and C are those in which the lowest ratings in the PULHES profile are, respectively, 2 and 3. Dr. Karpinos presents figures to show the relative importance of the various PULHES factors in accounting for presence of the inductee in physical categories B and C. The factor E (eyes) stood first as the reason for assignment to both B and C. For physical category B the factors were arranged as follows by order of magnitude: E, L, P, S, H, and U. For category C, it was E, P, L, S, U, and H. By color, the most limiting factor was E for whites and L (lower extremities) for Negroes. Although the age-range considered was narrow, the proportion of inductees qualifying for physical

category A was highest (79 per cent) for the youngest (ages 19-20) and lowest (70 per cent) for the oldest (ages 23-25).

MARILYN SCHWARTZ ARON

• • •

HUNGRY PEOPLE AND EMPTY LANDS¹

THIS essay by the past director of demographic research in UNESCO (at present University Professor of Economics in the Maharaja Sayajirao University of Baroda, India) is a lucid, impassioned if not occasionally alarmist, plea for a world population policy. Chandrasekhar sketches the now-familiar pessimistic picture of two-thirds of the world's population increasing rapidly in an area of extreme congestion and low level of living and one-third of the world's population possessing the highest levels of living and the greatest room for expansion while in or approaching the stationary phase of population growth. The rapid population increase in such areas as Japan, China, and India only serves to increase the existing imbalance of the present distribution of the world's wealth. Moreover, the whole situation is further seriously aggravated by "man's blind, insidious, unknowing war on nature" which has resulted in soil erosion and depletion of natural resources. These processes, although occurring everywhere in various degrees, are most evident in precisely those countries having the greatest population pressure. Chandrasekhar argues that these combined factors of overpopulation and the mismanagement and abuse of natural resources are essential elements in current international tensions and, if allowed to go unchecked, will very likely lead to World War III. A world population policy built upon the following five objectives is the author's remedial program. They are (1) the grant of political freedom to all colonial peoples; (2) the universal adoption of birth control; (3) planned international migration (Chandrasekhar visualizes the organization of an International Migration Authority which would promote migration, for example, from the overpopulated areas of Asia

¹ Chandrasekhar, S.: HUNGRY PEOPLE AND EMPTY LANDS. Indian Institute for Population Studies, Baroda, India, 1952, 306 pages, \$3.50.