Using Health Education Aides in Counseling Pregnant Women

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THE USE of nonprofessionals as adjunct workers in health education is significantly helping to alleviate the critical shortage of trained health education personnel. As Schaefer and Hilleboe (*1*) pointed out 2 years ago, "The choice has ceased to be whether or not the old order of public health will change in the way it conceived of its mission and of the administrative problems to be solved. The choice is whether coming changes will be thrust upon community health agencies ill prepared to absorb them or adapt them, or whether organized health agencies will seize their opportunities through foresighted planning, and influence the shape of the future."

In 1966, the District of Columbia Department of Public Health seized such a new opportunity, and the Health Education and Information Division began employing nonprofessional health education aides to supplement the work of professional public health educators in maternal and child health. Funds made available through the U.S. Children's Bureau have financed the employment and training of six aides.

Initially, a grant of $1,240,188 was made to the health department for fiscal year 1967 "to help reduce the incidence of mental retardation caused by complications associated with child bearing through the provision of necessary health care to prospective mothers."

At that time it was estimated that approximately 7,000 women had babies that were delivered at public expense. About 70 percent of these women had complications associated with pregnancy. The rate of maternal mortality in the District of Columbia is almost twice as great as that in the United States as a whole, and during the years 1960 through 1962, there were 68 deaths per 100,000 live births (*2*). The 1962 infant mortality rate in the District of Columbia was 34.9 per 1,000 live births (*3*)—almost 1½ times as great as that in the United States as a whole.

Although health services for pregnant women were available at the health department's clinics, statistics of the Bureau of Maternal and Child Health showed that of the 7,000 women who had their babies delivered at public expense, approximately 2,500 received no prenatal care and an additional 2,500 did not receive care until late in pregnancy.

Included in the financing of the maternal and infant care project was $31,205 to pay the salaries of two public health educators, one health education aide, and one clerk typist. Their function was to motivate pregnant women to seek health care early in pregnancy. The annual starting salary of the aide was $4,641.

The budget for health education was increased to $71,772 in a project continuation grant for fiscal year 1967 to provide for a total of three

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health educators, five health education aides, and one clerk typist.

For fiscal year 1968, a total of $80,435 was made available to increase the staff to four health educators, six aides, and one clerk typist.

The job qualifications for a health education aide were minimal: a high school diploma and 2 years of appropriate experience. These qualifications did not require specific experience in either public health or public health education and were deliberately left flexible.

The health department's personnel division, the U.S. Employment Service, local hospitals, and other agencies referred applicants to the chief of the Health Education and Information Division, who in consultation with other staff members, interviewed applicants and selected those who were most interested, communicative, and personable.

By July 1967, six aides had been hired, five women and one man. They ranged in age from midtwenties to the late thirties. Three were single. The others were married; one a mother.

Although there was some skepticism about employing a male aide to counsel pregnant women, we found that this aide and his successor, also a man, developed rapport with their clients easily and were responsible for as many clinic referrals as the female aides. In addition, the male aide influenced fathers-to-be who, in turn, encouraged their wives to seek care.

Duties and Responsibilities of Aides

While the public health educators dealt with program planning and other problems which required professional skill, such as meeting community leaders and civic groups and conducting inservice training for teachers, social workers, and group workers, the health education aides sought out and met with pregnant women.

The job description, as written by health education program directors and the personnel division, stated that the aide would participate "in a program of public health education directed toward motivating pregnant women . . . who now receive little or no prenatal care to seek medical attention early in pregnancy.

"As a nonprofessional worker familiar with the people, problems, and way of life in lower socioeconomic neighborhoods of the city, the aide bridges the gap between professional and lay patterns of language, health attitudes, and practices in stimulating expectant mothers to begin and continue regular attendance at maternity clinics.

"After discussion with, and approval by the health educator supervisor, the aide implements the plan, which might include one or more of the following techniques: (*a*) providing pregnant women with appropriate educational materials, (*b*) enlisting their participation in group discussions, (*c*) encouraging their presence at church or other community meetings on the subject, and (*d*) having talks with persons in their homes. Through such efforts, the aide informs the women of available maternity facilities, explains their functions, and as necessary, offers personal assistance such as making clinic appointments, providing or arranging for transportation, and baby sitting services."

Further, the aide "conducts small neighborhood group discussions and classes on the topic of early medical care in pregnancy, takes part in larger community meetings at which lectures and exhibits are presented to stimulate the interest and voluntary participation of church and civic groups in the project, solicits the help of individual volunteers from the neighborhood in distributing materials. The aide persuades the expectant mothers to attend the clinic and assists in the development and preparation of health education literature concerning prenatal care in language easily understood by residents of the neighborhoods covered by the program."

Finally the aide "is responsible for keeping a record of daily activities and for reporting periodic progress to the health educator supervisor. All aides are supervised by a professional health educator who gives assignments and helps the aide plan activities and deal with problems which arise."

The Aides' Training

To prepare the aides for their assignments, intensive orientation and training for a 3-week period was carefully planned and carried out. It consisted of a series of informal classroom discussions, on-the-job observations, and field trips to health facilities.

The sessions began with an explanation of the question—What is public health? Gradually,

the subject matter advanced from general to specific so that the aides understood the multifaceted relationships of their role and the importance of their own contribution. Topics covered included the objectives of the health department, its functions and services, particularly emphasizing the Bureau of Maternal and Child Health, and the Health Education and Information Division in relation to maternal and child health problems; the statistical scope of these problems in the community; the importance of prenatal care, well baby care, and birth control; and a survey of health department facilities and services which are available to deal specifically with these problems.

In addition, other health department services more pertinent to general family health within the population served by the aides were explained. In this way, the aides were prepared to direct clients to facilities such as health screening tests for detecting chronic diseases, public health nursing services, and home care programs.

To complete the aides' training, several hours were spent discussing the services of other community agencies such as the Tuberculosis Association, Cancer Society, Heart Association, and Visiting Nurse Association.

After completing this groundwork, the health educator supervisor arranged a tour of health department clinics, emphasizing the infant and well baby, maternity, birth control, tuberculosis, and venereal disease clinics. In addition, they visited the District of Columbia General Hospital. At each locale, ample time was allowed for questions and discussion between aides and clinic staff members.

With this background, the aides began learning specific techniques for the job they would be doing. For example, they had several sessions on how to interview a client. Specifically they discussed how to greet people, how to gain their confidence, how to avoid prejudging a client, how to acknowledge one's own feeling to avoid prejudice, and how to overcome the client's resistance to the aide's efforts to help the client solve her problems. They also learned how to keep records, and how to write a report.

At this point in the training, the aide began accumulating a list of prospective clients from the files of the health clinic of those women who had not returned for examination, from welfare agency referrals (all District of Columbia agencies working in this field had been advised of the health aide program), and from the referrals of friends and relatives of clinic patients. Also, they personally contacted women at meeting places such as laundromats, community centers, and welfare program centers.

Assets of Aides

Of course, as the aides moved into the community and began calling on the pregnant women, the problems they encountered reached deep into the inner-city culture, and it was here that the aides demonstrated their most valuable asset—familiarity with the life styles of the women. Often persons who feel hostile toward a professional worker whose help he eschews feels no such animosity toward a person who speaks his own idiom.

The initial interview between aide and client was intended to establish rapport and to find out why the woman had not sought prenatal care or why she had discontinued it. When the aide asked, "Are you seeing a doctor?" most likely she would be told, "No, I didn't use one last time either," or "I had one the first time and he didn't do anything," or "When my time comes, I'll go to D.C. General Hospital," or "I didn't have the time to go back."

Often women simply did not understand why prenatal care was necessary, but most of the time, even if they understood, they had so many other pressing problems that took precedence, they relegated prenatal care to last place. They simply lacked the time and effort necessary to seek such care.

Some Examples of Aides' Services

Case No. 1. Miss M. was 20 years old, the pregnant, unwed mother of a 1-year-old child. She lived in a two-bedroom apartment with her mother who had eight children of her own, a stepfather who was ill, and a senile grandmother. Except for her stepfather who did occasional yardwork, they had no financial support. During her visit to Miss M., the aide noted that "these people are destitute." The children were without clothing, and except for a box of crackers, there was no food in the house.

Taking one problem at a time, the aide, after conferring with her supervisor, contacted the Salvation Army which supplied clothing for the children and formula and nipples for the baby. Then the aide took Miss M. to the food stamp office where they gave her $19 worth of food stamps immediately and explained how to obtain stamps in the future.

The aide then contacted welfare authorities and found that the family was eligible for assistance. With such major problems out of the way, the aide took Miss M. to the maternity clinic for her first visit and then left two bus tokens with her for the next appointment. The case was marked, "followup."

Case No. 2. In another case, marked "closed," Miss L., the unwed mother of two children, came to Washington from North Carolina to assist her brother and sister-in-law who needed help with their children because both worked. After she moved in, they told her they could not give her the allowance they had promised. She began going out with a man and soon found she was pregnant. She went to the United Planning Organization Office (UPO)—a local agency funded by the Office of Economic Opportunity to help the poor—for assistance.

The UPO social worker telephoned the health education office, and an aide went to visit Miss L. Discovering that she was not receiving prenatal care, the aide made an appointment at Gales Maternity Clinic, an intake clinic where women are given initial prenatal examinations. Because Miss L. did not know the city, the aide took her to the clinic, and then returned her to her home. Miss L. was referred to the District of Columbia General Hospital's complication clinic, to the health department's dental clinic, and to the hypertension clinic. The aide explained the function of each clinic and went with her to the three appointments.

Following this, Miss L. was scheduled for two clinic visits each week. Because of the early hour for clinic appointments, the aide arrived at Miss L.'s apartment at 6 a.m. and arranged for the supervision of the children during Miss L.'s absence. One morning Miss L. telephoned the aide to say that her brother had moved away without leaving his address, and she had no place to go. The aide contacted the District of Columbia Department of Public Welfare which arranged for 3 weeks' temporary shelter and then paid her transportation back to North Carolina.

Conclusions

Health education aides contacted the so-called hard-core inner-city women who, judging by their past histories and avowed intentions, would not have sought prenatal care on their own volition.

Although the aides' basic function was to motivate pregnant women to seek care, often the client's living circumstances were such that the aide touched on problems traditionally beyond the aegis of health education. In a ghetto community, however, the human problems are too complicated to be resolved within the specialized domain of a single discipline, and the aides attempted to deal with whatever problems stood in the way of the client's securing prenatal care.

Because this program is less than 2 years old and still in the process of evaluation, the aides' impact is yet to be determined. However, according to the departmental records, the aides either sent or took approximately 40 hard-core pregnant women to health department clinics each month of the program. These women represent an increase of 400 patients during 1967, a total of 3,500 more patient visits than during 1966. During the same period, the patient load of the birth control clinics was increased by 37 percent, an actual increase of more than 4,600 women during 1967.

No doubt there are numerous factors influencing these increases in utilization of clinics, but District of Columbia health educators believe that the influence of the health education aides was most important.

REFERENCES

(1) Schaefer, M., and Hilleboe, H. E.: The health manpower crisis: cause or symptom? Amer J Public Health 57:14, January 1967.

(2) U.S. National Center for Health Statistics (Division of Vital Statistics): Infant, fetal, and maternal mortality. United States, 1963. Series 20, No. 3. PHS Publication No. 1,000. U.S. Government Printing Office, Washington, D.C. pp. 14, 20.

(3) U.S. National Center for Health Statistics (Division of Vital Statistics): Vital statistics of the United States, 1962. Vol. 2. Mortality, pt. a. U.S. Government Printing Office, Washington, D.C., Sec. 1, p. 27.

Federal Publications

Occupational Disease. The silent enemy. *1968; 9 pages; compiled by the National Center for Urban and Industrial Health in Cincinnati, Ohio.*

Describes lung diseases from breathing asbestos or sugarcane fibers, and coal, cotton, or radioactive dust; cancer of the bladder, from handling certain dye ingredients; skin diseases including skin cancer, from handling toxic chemicals and coal tar pitch; and loss of hearing from industrial noise. Contains a list of questions designed to help readers determine whether there are health hazards on their jobs and a list of protective measures they or their employers may take.

Copies of the pamphlet may be obtained from the Bureau of Disease Prevention and Environmental Control, Public Health Service, Washington, D.C. 20201.

Innovation in Local Health Services. *PHS Publication No. 1664–2; by Robert E. Mytinger; February 1968; 75 pages; 45 cents.* Gives some of the forces which move local official public health departments in California toward change or innovation. Contains 29 tables, 12 figures, and appendices.

Radiation Bio-Effects Summary Report, January–December 1967. *PHS Publication No. 1809; 1967; 119 pages.* Presents an annual report which describes recent research conducted by the Radiation Bio-Effects Program, National Center for Radiological Health, Bureau of Disease Prevention and Environmental Control. This program, one of five in the Center, is concerned primarily with defining the biological effects of low radiation doses in animal systems. The first part of the report reviews briefly the organization and mission of the program, the second part discusses in varying detail the research projects, and the appendix lists the publications in the open literature authored by program scientists during the year.

Tracking Diseases from Nature to Man. *PHS Publication No. 1675; 1967; 54 pages; 30 cents.* Contains 22 stories which tell how diseases have been tracked from nature to man. Tells about the encephalitis outbreak, histoplasmosis epidemics, and an epidemic caused by *Salmonella* infection. Contains about 40 black and white pictures and lists most of the zoonoses found in the United States. Booklet is designed to be entertaining and educational reading for the general public and for school children.

An Acclimation Room for the Detection of Low Radium 226 Body Burdens. *PHS Publication No. 999–RH–31, 1968; 19 pages.* A mobile breath radon detection apparatus has been used for measuring low radium-226 body burdens. The unique feature of the apparatus is an acclimation room designed to accommodate subjects for periods up to 1 week in a low-radon environment. Radon concentrations in the acclimation room have been reduced to an operating level of 0.0005 pCi per liter, a reduction of approximately 600:1, by an air processing unit employing activated coconut charcoal. The apparatus permits determination of very low radium-226 body burdens for two subjects simultaneously, in comfortable surroundings, during the extended periods required for elimination of previously inhaled radon from the body. The construction and operation of the acclimation room and breath sample collection are described. Radium-226 body burdens for the subjects and a radon elimination curve for one subject are included.

Tuberculosis Beds in Hospitals and Sanatoria, June 30, 1967. *PHS Publication No. 801; revised January 1968; 13 pages; 20 cents.* Provides a directory of major hospital resources available in the United States for the care of tuberculosis patients, as reported in a survey of June 30, 1967. Includes data for non-Federal hospitals which cover institutions with 10 or more beds set aside for tuberculosis patients; data for Federal hospitals include all available beds for tuberculosis patients, as reported by the Public Health Service's Division of Indian Health, Department of the Air Force, Department of the Army, Department of the Navy, and the Veterans' Administration.

This section carries announcements of new publications prepared by the Public Health Service and of selected publications prepared with Federal support.

Unless otherwise indicated, publications for which prices are quoted are for sale by the Superintendent of Documents, U.S. Government Printing Office, Washington D.C. 20402. Orders should be accompanied by cash, check, or money order and should fully identify the publication. Public Health Service publications which do not carry price quotations, as well as single sample copies of those for which prices are shown, can be obtained without charge from the Public Inquiries Branch, Public Health Service, Washington, D.C. 20201.

The Public Health Service does not supply publications other than its own.

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phr synopses

JOHNSTON, PHILIP W. (Massachusetts Department of Public Health): ***Automated vision screening. Public Health Reports, Vol. 83, November 1968, pp. 907–912.***

More than half of the working time of the staff of many school health departments is devoted to screening children for sensory impairments. An automatic screener can reduce the time spent in vision screening. With such a device, vision screening in schools and elsewhere can be done reliably, easily, and fairly inexpensively.

Integrated logic circuitry is now used extensively in the automated vision screener that Johnston designed and describes. The vision tests may be self-administered or administered by another person, such as the school nurse, in which case the subject responds verbally rather than by depressing buttons. In both modes, lens insertions, occlusions, and target selections are accomplished automatically. With the automatic screener, a wide variety of visual functions can be tested. These functions include visual acuity, latent hyperopia, heterophoria, and color perception.

The targets may be presented on slides, on rotating film, or on fixed panels selectively illuminated. Lenses are inserted in the optical paths by the activation of rotary solenoids. Occlusion is effected by means of mechanical maskers or the selective extinction of illumination. Numbered metal disks or punched cards are used in scoring the self-administered tests.

Field studies indicate that test sequences may be programed so that they will produce results which will correlate closely with those achieved with standard screening procedures, such as the free space version of the Massachusetts Vision Test. These studies also indicate that the net overreferral rate will not exceed 3 percent in those school districts which have previously maintained satisfactory vision screening programs.

GULLEN, WARREN H. (Medical College of Georgia, Augusta), BEARMAN, JACOB E., and JOHNSON, EUGENE A.: ***Effects of misclassification in epidemiologic studies. Public Health Reports, Vol. 83, November 1968, pp. 914–918.***

Comparisons of disease rates are frequently made. The rates observed may be affected by classification errors. Some persons will be misclassified according to disease status or according to presence of an attribute, or both.

Under broad assumptions, the difference in observed sample prevalence rates is never larger than the difference in true sample prevalence rates, even if there is classification error in assigning persons to groups as well as to disease categories. Thus, even if the investigator cannot quantitate the classification error and adjust for it, or if he is ignorant of it, there may be some comfort in that the comparison is a conservative one, and classification error never results in the apparent difference being larger than the real difference. There is a problem since unless one quantitates and adjusts for the classification errors, the apparent difference in rates may be substantially less than the true difference, and the investigator may well not detect a "significant" difference that really exists.

A second perhaps comforting feature is that if the percentage of each type of classification error is less than 50 percent, the apparent difference in sample rates and the true difference in sample rates are in the same direction and, hence, the correct group will have the larger apparent rate.

This discussion is concerned only with classification errors and their effects on differences in sample rates. Any inference from sample rates to population rates also involves the effect of sampling variability. Therefore, the difference in observed sample rates may, because of sampling variation, be larger than the difference in true population rates.

WHITE, DAVID L. (San Mateo County Department of Public Health and Welfare), NAY, PAUL D., and BLACKFORD, LILIAN S.: ***Use of the venereal disease clinic of San Mateo County, California. Public Health Reports, Vol. 83, November 1968, pp. 954–956.***

In the period January through June 1967, 495 persons came to the San Mateo County (Calif.) venereal disease clinic. Of these, 256 were white men, 97 white women, 91 nonwhite men, and 51 nonwhite women. Nonwhites comprised less than 5 percent of the county population and 28 percent of the clinic population; males comprised 49 percent of county population, 70 percent of clinic population.

The median age of clinic patients was 22.5 years, with 31 percent under age 20. Of the persons self-referred, 285 were men and 92 women. However, of the total clinic population of persons self-referred and referred by others, only 38.6 percent actually had venereal disease. Women seemed to be better judges of the presence of venereal disease than men.

The percent of positive diagnosis of venereal disease was 69.7 percent among nonwhites and 26.1 percent among whites. The lowest rate of positive diagnosis was the 19.5 percent among white students.

phr synopses

PERRY, LOWELL W. (George Washington University School of Medicine, Washington, D.C.); POITRAS, JEAN-MAURICE, and FINDLAN, CLARE: *Rheumatic fever and rheumatic heart disease among U.S. college freshmen, 1956–65. Prevalence and prophylaxis. Public Health Reports, Vol. 83, November 1968, pp. 919–938.*

Between 1956 and 1965, 148 colleges and universities participated in a nationwide survey to determine the prevalence of rheumatic fever and rheumatic heart disease among freshmen students. Of 767,600 participating students, 12,134 or 15.8 per 1,000 students examined had a valid history of rheumatic fever or rheumatic heart disease, or both. The prevalence of rheumatic fever was generally highest in the Rocky Mountain States. Among the students with rheumatic fever, 30.8 percent had rheumatic heart disease. Among the students with rheumatic heart disease, 30.1 percent had no previous history of an acute episode of rheumatic fever.

During the decade of the study, the prevalence of rheumatic fever and rheumatic heart disease decreased by approximately 36 percent, and the prevalence of rheumatic heart disease alone decreased about 75 percent. This decrease occurred in both the white and nonwhite students and in both public and private colleges throughout the United States.

Of the 12,134 students with rheumatic fever or rheumatic heart disease, or both, recommendations for prophylactic medications generally were received by a greater percentage of those who experienced their first attack of rheumatic fever in recent years. However, during the decade of the study only 55.1 percent of these students received prophylactic medication. Of the students for whom prophylactic regimens were recommended, only 28.0 percent were taking the medications at the time of the survey. The percentage of those who were maintaining prophylaxis increased according to the number of attacks they experienced, but only 37 percent of those with four or more attacks continued to maintain prophylaxis.

Only 65 percent of the students with rheumatic heart disease had ever received prophylaxis, and only about 42 percent of these continued to take prophylactic medication. A higher percentage of white and nonwhite females received and maintained prophylaxis than males of both races. A greater percentage of students for whom oral penicillin was prescribed maintained prophylaxis than did students who received other types of medication.

FEIGENBAUM, ERNEST (Public Health Service), CHERNEY, ANN, SPRADLIN, ERNEST, and FRY, ADAM: *Comparing Mantoux and jet-injection methods of tuberculin skin testing. Public Health Reports, Vol. 83, November 1968, pp. 974–978.*

Results of intradermal tuberculin skin tests using hypodermic jet equipment were compared with results obtained by the standard Mantoux needle-syringe technique in a study of 1,478 Vietnamese mental patients suspected of having a high prevalence of tuberculosis. If intradermal tuberculin skin test readings after jet injection were discovered to be equivalent to Mantoux test results, mass testing for tuberculosis would be expedited through more efficient use of existing medical and paramedical personnel.

A foot-powered jet-injection apparatus, disposable syringes and needles, and tuberculin, PPD RT-23 with Tween 80 diluted to 1 TU per 0.1 ml. dose, were used in the test. Each syringe contained an 0.1 ml. dose, and the jet apparatus was set to dispense 0.12 ml. On each day of testing the hypodermic jet was calibrated to actual quantity delivered before being used, as suggested by the manufacturer.

One nurse used the needle-syringe method, and a second nurse used the jet injector to administer the test. The right arm-left arm distribution varied from ward to ward, and patients in all 18 wards of the hospital were given tests in a 2-day period. A third nurse spent 2 days reading the reactions 72 hours later.

World Health Organization criteria of 8 to 10 mm. of induration for the determination of positive reactors were used, and procedural protocol was supervised by representatives from both Vietnamese and American medical personnel.

Using 10 mm. of induration as the lower limit of positivity, 177 patients were tuberculin negative by Mantoux technique, and 607 were negative to jet-injected antigen. This number represents a false negativity rate of 77 percent among tests by jet injection. A total of 326 tests by jet injection, were completely nonreactive, while 133 were nonreactive to Mantoux testing. This discrepancy obviates any possible revision of criteria for positivity to compensate for the generally smaller reactions found by others, as well as ourselves, to the jet-injection method of tuberclin skin testing.

Hypodermic-jet intradermal tuberculin skin tests with the equipment used in the study did not seem sufficiently sensitive, when compared with standard needle-syringe techniques, to warrant its use in mass surveys of populations with high rates of tuberculosis.

phr synopses

ROBERT H. HUTCHESON, JR. (Tennessee Department of Public Health): *Iron deficiency anemia in Tennessee among rural poor children. Public Health Reports, Vol. 83, November 1968, pp. 939–943.*

Of 15,681 children under age 6 brought to 87 rural immunization clinics in Tennessee in 1967, a large number—at least 10 percent—were anemic. The 1-year-olds were more likely to be anemic than the other age groups under 6. At least one-fourth of the nonwhite 1-year-olds were anemic.

A group of 576 children 1–9 years old who had been screened during a 6-month period and found to have hematocrit values of 29 gm. or less of hemoglobin per 100 cc. of blood were selected for treatment with iron. The treatment program in 1967 cost $27,120, including $15,000 for durable equipment. The State health department supplied public health nurses in the rural health department clinics with vitamins and iron and with ferrous sulfate solution to treat these children in exchange for supplying the department with the serial hematocrit value and other data on each child treated. Each nurse in turn distributed the supplies to the mother of the anemic child and instructed her on the daily dosage. She also suggested a good diet with emphasis upon dry baby cereal.

Ninety-three percent of the 576 children responded to iron treatment. The hematocrit level of most infants increased 2 or 3 percentage units within 2 weeks—from 30 percent of packed cell volume at the beginning of treatment to 32 or 33 percent. The levels of most children finally increased to 32 percent. The children's appetities and dispositions also improved. The mothers were pleased and thus more inclined to complete their children's immunizations and to follow the public health nurses' advice about feeding. In view of these results, the cost of the program was small.

ZIMMERMANN, W. J. (Iowa State University of Science and Technology), STEELE, J. H., and KAGAN, I. G.: *The changing status of trichiniasis in the U.S. population. Public Health Reports, Vol. 83, November 1968, pp. 957–966.*

To determine the prevalence of *Trichinella spiralis* infections in the U.S. population, a statistically designed study has been initiated at the Veterinary Medical Research Institute, Iowa State University of Science and Technology, Ames. The study has an approximate goal of examining 10,000 human diaphragms solicited from all 50 States and the District of Columbia.

Five thousand diaphragm samples were examined during the period from February 1, 1966, through May 20, 1968. The samples were obtained from 130 hospitals in 37 States and the District of Columbia. Trichina larvae or cysts were found in 210 (4.2 percent) of the diaphragms examined. The infected diaphragms came from 33 States and the District of Columbia. The 4.2 percent prevalence of trichiniasis that was observed represents a marked reduction from the prevalence found in a similar study by the National Institutes of Health, Public Health Service, conducted during the years 1936–41; 16.1 percent of the 5,313 diaphragms examined in that earlier study were found to contain trichinae.

Prevalences of 1.6 percent for persons 44 years and under and of 4.7 percent for persons 45 years and over have been obtained in the current study. Studies on the condition of the larvae have revealed a predominance of dead trichinae; only 12.9 percent of the positive samples yielded living trichinae. The infections have generally been light; 80 of the 210 positive diaphragm samples in our study yielded less than one trichina per gram, and only two samples yielded more than 100 per gram.

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