IHS Fellows Program Aimed at Lowering Injuries, Deaths of Indians, Alaska Natives

Unintentional injuries pose one of the most significant public health problems facing American Indians and Alaska Native people today. Annually, more than 1,000 people die prematurely from trauma as the direct result of unintentional injuries, and 10,000–12,000 Native Americans are hospitalized for trauma and spend as many as 80,000 days in Indian Health Service (IHS) and contract medical care hospitals. An estimated $70 million was spent in fiscal year 1986 to transport and treat injury victims. More than 330,000 outpatient visits are recorded annually by IHS and tribal health facilities for the treatment of injuries.

To obtain the trained staff needed to work effectively to lower this toll of deaths and injuries, the Indian Health Service launched a fellowship training program. The IHS Injury Control Specialist Fellowship Program, which began in January 1987, has recently graduated its first group of 11 specialists.

The 1-year program has several unusual features. Participants remain in their jobs except for 5–6 weeks when they travel to universities and to Gallup, NM, for short, intensive courses taught by school of public health faculty.

The first course, "Issues in Injury Control" offered in the spring, provides an introduction to the etiology of injuries and an examination of injury problems in economic and human terms. Emphasized are occupational injuries and the roles of motor vehicles and alcohol in injury causation. Various preventive strategies, including health education, are discussed.

The second course, "Epidemiology of Injuries," offered in the early summer, identifies the basic epidemiologic approaches to important categories of injuries, such as those related to transportation, work, and recreation, and to strategies for reducing their frequency and severity. Major problems, successes, and failures in control and opportunities for research are emphasized.

The final course, "Implementation of an Injury Surveillance System and Development of Intervention Strategies" is offered in late summer. The Fellows as a group implement the IHS Surveillance System at one IHS hospital. Intervention strategies are developed based on the case histories of specific injuries. Informal discussions and work groups are used.

Each Fellow is required to conduct a special study related to injury prevention or control. These projects are carried out during the fellowship year. The projects undertaken by the first group of Fellows are the following:

Does the Safety Belt Convincer Convince?—Ray A. Van Ostran
Personal Emergency Response System in an Indian Community—Jacqueline E. Moore
Firearm Morbidity and Mortality of Yupik Eskimos and Athabaskan Indians of the Yukon-Kuskokwim Deltas—William C. Bouwens
A Characterization of Pedestrian Fatalities Occurring to Native Americans Residing in the States of Michigan, Minnesota, and Wisconsin—Byron P. Bailey
What Influences Seat Belt Usage—Ronald D. Perkins
Study of Fatal Rollover Crashes in the Navajo Area—Larry Dauphinais and Ralph F. Fulgham
Costs Estimates of Traumatic Injury and a Discussion of the IHS Budget and Program Accomplishments—Jack L. Christy
The Warm Springs Indian Tribal Safety Program—A Case History Study—John G. Sery
Efficacy of the Use of Ambulatory Patient Care Reports on the Development of an Annual CIC Plan—Steven A. McLemore, Jr.
Developing a Standardized Community Injury Control Plan for Indian Communities—Edwin J. Fluette

Each successful Fellow receives a certificate upon completion of the program's minimum requirements. A credentialing committee has been established, and during 1988 the program will be audited by independent reviewers. The project's preceptors are the IHS's community injury control manager and the chief of the Environmental Health Services Branch, Division of Environmental Health.

Candidates for the fellowships must be employees of the Indian Health Service or be employed in a public health capacity by an Indian tribe, have a bachelor's degree in a health-related field, at least 5 years' experience in public health, and a minimum of 2 years' experience in community-based injury control programs.

The IHS was prompted to develop the fellowships because of the limited supply of trained personnel and the clear need for qualified professional staff. At present specialized education in injury control is not offered at the undergraduate level, and only a limited number of academic institutions have graduate level courses. A reasonable estimate is that less than 50 appropriately trained injury control practitioners are being graduated annually in the United States.

Twenty Fellows are being trained in 1988. The project was designed for 10–20 participants per year so that a cadre of highly skilled persons will be at work in a relatively short time. Officials of the IHS believe that the Injury Control Specialist Fellowship Program offers a realistic solution to a pressing need to train public health workers to understand the etiology and epidemiology of injuries as well as practical strategies for intervention.

—RICHARD J. SMITH, Manager, Community Injury Control, Environmental Health, Indian Health Service

Study Tests Lowering Cholesterol in Children Through Diet

One in four American children between the ages of 2 and 19 years has a high blood cholesterol level. While research has shown that lowering cholesterol levels in adults can prevent heart disease later in life, there is no direct scientific evidence that lowering cholesterol in children can prevent adult heart conditions. But research has shown a link between elevated cholesterol levels in children and early cholesterol deposits in the arteries, and other research has shown that children with elevated cholesterol levels have the same condition as young adults.

In response to the recent medical debate over the effect on children's growth and development of diet modification to lower cholesterol, the National Heart, Lung, and Blood Institute has designed the nationwide Dietary Intervention Study in Children with Elevated LDL–Cholesterol Levels (DISC). The study aims to show that changing diet and teaching proper nutrition are safe and effective ways to lower high cholesterol levels in children. The study is being conducted by the Institute's Prevention and Demonstration Research Branch in the Division of Epidemiology and Clinical Applications.

The pilot phase of DISC is expected to last 1 year and involve 120 children. The full-scale trial, set to begin in late 1988, will last 3 years and involve 600 children. Those selected for screening are limited to girls 8 and 9 years old and boys 9 and 10 years old. Only preadolescents are eligible for the study because in the 3-year trial they will be followed into early adolescence—a period of rapid growth when any effects of the low-cholesterol diet on development will be most obvious. Children will be excluded from the study if they are on medication that affects blood fats or have chronic illness, high blood pressure, or serious weight problems. Parents will be required to give written consent at each phase of the selection process.

Of those eligible, half will serve as a control group. These children will be referred to their physicians with a warning that they have elevated cholesterol. The other half and their parents will receive intensive dietary instruction in how to manage elevated cholesterol levels. The instruction, consisting of 14 sessions over a 3- to 4-month period, will teach families how to prepare low-fat, low-saturated fat, low-cholesterol meals, how to read labels, and other aspects of diet. Children will be assigned to each group at random, and all will receive periodic assessments of their growth, development, and cholesterol levels. Those children receiving dietary instruction also will receive psychological evaluations to determine what effect knowledge of high cholesterol may have on their self-image.

Six centers are participating in the study, which is expected to result in recommendations for a Federal policy on dietary regulation of cholesterol in children. The centers are the Johns Hopkins Children's Center, Baltimore; Kaiser Permanente Center for Health Research, Portland, OR; Louisiana State University School of Medicine, New Orleans; New Jersey Medical School, Newark; Northwestern University Medical School's Department of Community Health and Preventive Medicine, Chicago; and the University of Iowa Hospitals and Clinics, Iowa City. The Maryland Medical Research Institute will assist in data collection and analysis.

WHO Book Describes Community-Oriented Medical School Education

The experiences of 10 medical schools located around the world indicate that the change to community-oriented and problem-based education was worth the effort. A study involving schools in Australia, Cameroon, Canada, Israel, Mexico, Nepal, the Netherlands, the Philippines, and the United States is described in a book that is both a unique source of objective and systematic data and a cause for optimism.

The book, "Innovative Schools for Health Personnel," by R. Richards and T. Fulop, was designed for teachers and educational planners. It identifies a number of fundamental questions, several methods for achieving objectives, and potential areas for measuring the success of these methods.

It also records the results of a major cross-institutional review of educational changes in four main chapters. The first outlines the objectives and methodology of the study, which centered on the use of a questionnaire combined with interviews and discussions at each of the 10 schools.

The second chapter examines and compares curricula to determine the extent to which 10 characteristics of community-orientation and problem-solving have been successfully introduced. Specific points considered include the underlying principles of the school, the extent of learning through experience, organizational linkages with the health care system, the use of problems as a basic element in organizing the content of the curriculum, and the degree of active student participation.

Progress in achieving the schools' stated goals is examined in the third chapter, which establishes seven general categories for assessing outcomes and then examines the schools collectively and individually on this basis. Four of the categories relate to direct impact on the health care system, and the remaining three are concerned with the characteristics of graduates.

The final chapter outlines and discusses the findings of the analysis, including a number of highly encouraging results. Throughout the book numerous tables and charts facilitate the comparison and interpretation of the study data.

Copies of the book are available in English (French version in preparation) from the United Nations Bookshop, New York, NY 10017, or WHO Publications Center USA, 49 Sheridan Ave., Albany, NY 12210. Price: US $10.20; Sw. fr. 17. ISBN: 92 4 170102 1.

Uniform Definition Proposed for Learning Disabled

The nation's first comprehensive assessment of the prevalence, causes, diagnosis, treatment, and prevention of learning disabilities was presented as a report to Congress in the fall of 1987.

The report proposes a new uniform definition to be used in prevalence studies, diagnosis, research, administrative actions, and legislation concerning learning disabilities. In the new definition, the term "learning disabled" refers to a heterogeneous group of disorders "presumed to be due to central nervous system dysfunction" and "manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical abilities, or of social skills."

Entitled "Learning Disabilities: A Report to the U.S. Congress," the report recommends future directions for Federal research on these disabilities which affect an estimated 5 to 10 percent of the population. It was prepared at the request of Congress by the Interagency Committee on Learning Disabilities, which is composed of representatives from 12 agencies of the Department of Health and Human Services and the Department of Education. The committee is chaired by

James B. Wyngaarden, MD, director of the National Institutes of Health.

The report summarizes learning disabilities programs of the 13 Federal agencies represented on the committee, proceedings of a 2-day National Conference on Learning Disabilities, and presentations at a public hearing held in the fall of 1986. It calls for the following actions:

- the establishment of multidisciplinary learning disability research centers,
- the development of a classification system that clearly defines and diagnoses learning disabilities, conduct disorders, and attention deficit disorders, and their interrelationships,
- an epidemiologic study large enough to determine the actual prevalence of learning disabilities,
- the establishment of a central information clearinghouse to promote the sharing of information among researchers, parent groups, and trainers of teachers, and
- increased support for a broad range of research on learning disabilities, extending from basic research on the neurobiology of learning, through studies on brain function and neurotoxicology, to studies of the effectiveness of different teaching and remediation approaches for learning disabled students.

Although precise numbers of the learning disabled are not known, the committee believes that the prevalence of learning disabilities in the United States is somewhat higher among socioeconomically disadvantaged groups, and higher in males than in females.

Copies of the report can be obtained from the National Institute of Child Health and Human Development, P.O. Box 29111, Washington, DC 20040.

Six New Research Centers Studying Kidney and Urinary Tract Diseases

Kidney and urinary tract diseases are among the nation's most critical health problems. They affect more than 13 million Americans and account for more than 80,000 deaths a year.

The George M. O'Brien Kidney and Urological Research Centers Program, named for the late Congressman O'Brien of Illinois, will encourage interdisciplinary research and pursuit of innovative clinical and epidemiologic studies of the causes, therapy, and prevention of disorders of the urinary system. The centers program, authorized by the U.S. Congress in 1986, is administered by the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK).

The goal of the program is to reduce the major causes of kidney and urinary tract diseases by the early 1990s. NIDDK plans to fund the centers' research for 5 years. Four million dollars has been appropriated for the first year, which began August 1, 1987.

The six centers and their estimated funding for fiscal year 1987 are the Harvard Center for the Study of Kidney Disease, Boston, $832,815; the University of Michigan at Ann Arbor, $746,373; Vanderbilt University, Nashville, $631,260; the University of Alabama at Birmingham, $627,009; the Health Science Center at Syracuse, New York, $567,734; and the Northwestern University, Chicago, $554,810. Research projects at each center follow.

- The Harvard Center will conduct research on kidney disease of diabetes mellitus, the largest single cause of kidney disease, and on kidney transplant rejection. The research team includes scientists working at Brigham and Women's Hospital, Beth Israel Hospital, Massachusetts General Hospital, Joslin Diabetes Center, and Tufts-New England Medical Center.
- University of Michigan researchers will study the cellular, molecular, and clinical aspects underlying glomerulonephritis and other types of kidney disease and attempt to develop better methods of treatment and prevention.
- Vanderbilt scientists will study the cellular and molecular processes underlying progressive glomerular sclerosis, and investigate the biological steps that lead to rejection of a transplanted kidney.
- Researchers from various disciplines at the University of Alabama will study the mechanisms, causes, and effects of high blood pressure on the kidney and attempt to determine the factors that contribute to high blood pressure in kidney diseases, such as glomerulonephritis and interstitial nephritis. They also will study the effect of therapy for high blood pressure on the course of kidney diseases.
- The Health Science Center at Syracuse will conduct a multiinstitutional study of the causes and mechanisms of obstruction of the urinary tract. Urinary obstruction leads to abnormal function of the bladder and ureter and, if not corrected, can lead to kidney failure. The investigations will be conducted at Syracuse, at the University of Michigan at Ann Arbor, and at the University of Pennsylvania at Philadelphia. These studies may provide important information that could lead to new treatments for urinary obstruction.
- Northwestern University scientists will study the cellular and chemical aspects of enlargement of the prostate gland. Prostate enlargement, a common problem in men over age 40, results in about 270,000 operations in the United States each year. By age 50, prostate enlargement affects nearly half of all men; close to 100 percent are afflicted by age 80.

HRSA Grants to Help Community Health Centers to Help the Homeless

Secretary of Health and Human Services Otis R. Bowen, MD, has announced grants to organizations in 108 communities to improve health care for the homeless. Funds are to be used for primary health care, substance abuse and emergency health services, outreach programs focusing on prevention, and to help homeless persons establish eligibility for and to receive health services under entitlement programs.

Secretary Bowen described the new program's goal as an effort to encourage local public and private nonprofit agencies to strengthen efforts to improve the health status of homeless persons and to increase coordination with other programs in assisting them. The grants could provide health care for up to 400,000 of the 1 to 3 million estimated to be homeless in the United States. Recipient organizations must provide 25 percent matching funds.

The grants totaling $46 million were made mainly to community health centers and consortiums in 43 States, Puerto Rico, and the District of Columbia. Funding was provided by the Health Resources and Services Ad-

ministration (HRSA), Public Health Service. Grants were coordinated with other Federal programs through the Interagency Council on the Homeless, established by the Stewart B. McKinney Homeless Assistance Act of 1987 (Public Law 100-77), the National Association of Governors, the U.S. Conference of Mayors, the National Coalition for the Homeless, and the National Association of Community Health Centers.

Awards ranged from $67,000 to a community clinic in Eugene, OR, to almost $2 million to a community health center consortium in Los Angeles, CA. Awards in excess of $1 million were made to health organizations in Chicago, Kansas City, New York City, Philadelphia, Phoenix, San Francisco, and Washington, DC.

HRSA plans to assign health practitioners, mostly physicians and nurses, to some communities to provide health services to the homeless. The practitioners are members of the PHS Ready Reserve, made up of former PHS Commissioned Corps personnel willing to return to active duty for 2 to 3 weeks a year on specific assignments. They are available through a provision of the newly enacted National Health Service Corps Amendments Act of 1987. The law allows a form of "amnesty" for Corps scholarship recipients who have defaulted on service obligations. Defaulters may agree to perform service obligations in designated health manpower shortage areas.

Fully a sixth of all homeless persons are thought to be infected with a disease considered to be a public health risk. The most common is upper respiratory infection; the homeless person rate for tuberculosis is 500 times the national rate. Sexually transmitted and skin diseases are common. Sixty percent of the homeless are single men, 12 percent are single women, and 27 percent are families with children, the fastest growing group among the homeless.

—ELLEN RAWLINGS, Health Resources and Services Administration

Davis Elected Chair of NLN Home Care Subsidiary

Carolyne K. Davis, PhD, RN, former administrator of the Health Care Financing Administration, Department of Health and Human Services, was recently elected chair of the Community Health Accreditation Program (CHAP), a newly created subsidiary of the National League for Nursing. CHAP is the nation's only community-based quality assurance program for home care and community health, and it has been authorized as the independent governance structure for the League's home care accreditation program.

Dr. Davis is currently an international health consultant for Ernst & Whinney. She was elected by the CHAP Board of Governors, which comprises a wide range of industry, consumer, and third party payor representation. Gloria Pace King, RN, president and chief executive officer of the Visiting Nurse Association of Cleveland, was elected to serve as vice chair, and Stanley B. Peck, vice president of the Health Insurance Association of America, as treasurer.

"Unchecked growth in the home care industry has left the American public vulnerable, and CHAP accreditation is an extremely important tool to ensure consumers that they will receive high quality and appropriate services," Dr. Davis stated.

Health and Safety Concerns of Day Care Examined

Child care by other than parents has become a basic need for the majority of American families. The quality of their children's care is a basic concern to parents, to care providers, and to those in the community with responsibilities for safeguarding children's development, health, and safety. Parents often require assistance in selecting the child care option that will strengthen their family and assure that their children are receiving appropriate care.

Although many public health agencies have been active in protecting the health of children in day care, there has been very little systematization of those operations and only minimal reporting to public health professionals or to the community in general. Some important questions need answers. What is public health doing today to protect and promote the health and safety of children in day care? Are there some public health programs which could serve as models? How can this information be shared to encourage greater involvement by public health in day care?

"Health of Children in Day Care—Public Health Profiles" is a response to these questions. The Kansas Department of Health and Environment publication presents a number of successful models which can be replicated by other communities. Its 13 profiles describe public health contributions to improve the health and safety of children in day care, and the appendix references basic resource materials. The publication results from a project supported by the Health Resources and Services Administration, Division of Maternal and Child Health; and the Administration for Children, Youth, and Families, through its Office of Human Development Services, DHHS.

Copies may be requested without charge from the National Maternal and Child Health Clearinghouse, 38th and R Sts. NW, Washington, DC 20057; tel. 202:625-8410.

WHO Estimates 300,000 AIDS Cases by Year's End

The World Health Organization (WHO) expects that the number of AIDS cases will continue rising sharply to an estimated worldwide total of 300,000 by the end of 1988.

Dr. Jonathan Mann, Director of the WHO Special Programme on AIDS, said in his first annual review of the state of the global epidemic that there will be about 150,000 new cases in 1988, equal to the number of cases that have occurred since the 1970s. As of December 1987, 128 countries had reported a total of 72,004 cases, about half the total estimated to have occurred.

New AIDS cases in 1988 will come almost entirely from persons already infected with the virus. AIDS will continue to increase dramatically for at least the next 5 years, he noted in the report. WHO estimates that 5 to 10 million people are infected with human inmunodeficiency virus, or HIV, the virus causing AIDS.

IHS Workshops Train Community Health Workers in Nutritional Problems of Alcoholism Treatment

Indian Health Service (IHS) programs for the treatment of alcoholism in-

creasingly provide screening for nutrition-related health problems and assessment of nutritional status. However, the levels of training of community-level health facility staff members in nutritional aspects of alcoholism prevention and treatment may vary, and screening procedures may be inconsistent or incomplete.

To strengthen community programs, IHS trains professionals, paraprofessionals, and community members in the nutritional implications of alcohol abuse and the role of nutrition in the rehabilitation of the recovering alcoholic. Nutrition and alcohol workshops provided by the Nutrition and Dietetics Training Program offer basic nutrition education to help participants improve their effectiveness in counseling and treating alcoholic clients.

More than 500 persons have attended workshops in nine IHS areas since 1983. Attendees typically work in alcohol detoxification and chemical dependency programs; rehabilitation centers; IHS hospitals; Women, Infant and Children programs; and community nutrition education and health representative programs. Workshops are held in field locations on reservations and at the Santa Fe, NM, training center.

Course Content

The workshops provide participants with basic information on how alcohol abuse affects the body's systems and organ functions; how alcohol affects appetite, food absorption, and the use of nutrients; and how nutrition relates to alcoholism. The courses help participants identify principles of effective nutrition counseling and provide them with opportunities to evaluate clients and apply counseling techniques.

A basic objective is to increase understanding of criteria for nutritional screening and referral to dietitians or nutritionists. Participants are taught components of nutritional assessments and when to refer clients. Some longer workshops are designed to increase participants' awareness of such contemporary issues as current forms of food fads in relation to nutrition in alcoholism prevention and treatment.

Teaching methods and audio-visual materials were developed for groups with varying educational and cultural backgrounds whose members may have different levels of skill in reading, writing, and speaking English. Illustrations used in films and slides depict such concepts as the medical effects of alcohol abuse. Written materials for different reading levels were developed to present technical information on the effects of alcohol on digestion, blood circulation, liver function, the central nervous system, and bones and tissue. A fact sheet called "Alcohol and Blood Sugar" discusses alcohol-induced and reactive hypoglycemia. "Nutrition and Alcohol" addresses nutritional substitution, malabsorption, alteration of organ functions, blocking, and hyperexcretion. Malabsorption is explained by discussing how an alcohol-induced disaccharidase deficiency can contribute to diarrhea and nutritional deficiencies that result from decreased absorption of nutrients from the small intestine.

Course Applications

Workshop participants seek practical information and often ask, "What can I do?" A first step is to assess the client's nutritional status and to recognize psychological and physical aspects of the abuse as they relate to and affect food intake. Four main characteristics of abuse—poor self-concept, inability to handle stress, lack of meaningful experiences, and lack of significant relationships—are seen to influence an individual, for example, to overeat when stressed; and one or more factors may be at work when poor eating habits combine with excessive alcohol consumption, resulting in nutritional deficiencies.

A second practical application is in identifying poor eating habits. Participants are taught the importance of diet histories and practice obtaining 24-hour dietary recalls. Students have discussed their common experiences with the tendencies of their clients to forget foods eaten, to describe uneaten meals, and to misrepresent alcohol intake.

Aspects of treatment involve how intoxication and acute alcohol-related diseases affect eating habits and digestion. Participants learn how to encourage the use of decaffeinated beverages, the importance of serving small meals throughout the day and making eating pleasant, and techniques for evaluating weight status and controlling caloric intake. Recipes and foods to taste are provided to the participants.

Evaluation

Workshops are evaluated by the participants to provide the organizers with information on the overall effectiveness of the format, to guide content revisions and updating, to help determine the effectiveness of course materials, and to assess what types of information the participants find most useful for practical application. Participants are asked to complete an evaluation form and to describe what parts of the workshop they find most helpful to them. Among the presentations identified as most helpful are the effects of alcohol on the liver, the nutritional needs of alcoholic patients, and the relation of alcohol to malnutrition.

Information and Education

Information materials are developed for the workshops and distributed in response to requests by IHS nutrition professionals, tribal nutritionists, and other food, nutrition, and health program personnel. A teaching module developed for use by IHS and tribal nutritionists is used in conducting community programs and in-service education programs for hospital, rehabilitation, and other alcohol treatment center staff members. The module has found use in counseling and educational programs provided for alcohol abusers and their families. The module covers the role of the nutritionist or dietitian in alcohol abuse treatment, alcohol and malnutrition in American Indians and Alaska Natives, metabolic changes resulting from alcohol use, alcohol and birth defects, the role of nutrition in prevention and treatment, and dietary problems in abusers.

Techniques and materials developed through the workshops program are believed applicable to other sectors of the population at risk for alcohol and substance abuse, and in programs in developing countries.

—WYNONA A. TOWN, RD, MPH, Chief, Nutrition and Dietetics Training Program, and M. YVONNE JACKSON, PhD, RD, Chief, Nutrition and Dietetics Section, Indian Health Service, Public Health Service, Santa Fe, NM 87502 (505:988-6470).

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