NIH Consensus Conference Studies Elderly Sleep Ills

In an effort to assess the current knowledge on what changes in sleep are clinically important, how sleep disorders are best diagnosed and treated, and how the public can establish good sleep practices, the National Institute on Aging and the National Institutes of Health's Office of Medical Applications of Research convened a Consensus Development Conference on the Treatment of Sleep Disorders of Older People in March 1990.

At the end of the conference, a 13-member panel wrote a consensus statement based on presentations and discussions by physicians, scientists, health care professionals, and the general public. Following are highlights of the statement's findings:

—It has been estimated that more than half of the 29 million people over the age of 65 experience some disruption of sleep. These disturbances may be caused by such things as retirement and changes in social patterns, deaths of spouses and close friends, increased use of medications, and changes in circadian rhythms. Although changes in sleep patterns have been viewed as part of the normal aging process, new information indicates that many of these disturbances may be related to pathologic processes that are associated with aging.

—Education about sleep and sleep disorders of older people must be directed at all segments of the population. Physicians and medical students, nurses, social workers, and other allied health professions should be informed of the concepts of sleep physiology and pathophysiology and assessment and differential diagnosis. For audiences unfamiliar with the issue of sleep and the older person, the magnitude of the personal and societal toll in accidents, health, and unhappiness must be conveyed.

Other key points include proper use of medications, preventive health measures, and good sleep hygiene practices. Sleep complaints should be taken seriously and appropriately treated. Troubled sleep particularly affects the lives of older people. It can exacerbate illness and cause frustration, confusion, and depression. Many people accept sleep disturbances as part of the normal aging process. It is necessary to determine what is normal and what is disease. Basic research, especially using the powerful new techniques of modern biology, is critical to the understanding of the brain mechanisms of sleep and sleep disorders associated with aging

—During aging, the time spent in deeper levels of sleep diminishes, and there is an associated increase in awakenings and in the total amount of time spent awake during the night. Many older people suffer from such problems as depression, Alzheimer's disease, cardiovascular disease, upper airway incompetence, pulmonary disease, arthritis, pain syndromes, prostatic disease, endocrinopathies, and other illnesses which are very often associated with sleep disturbance. Relatively few carefully screened, medically healthy older people have symptoms related to these changes in sleep and in the distribution of sleep and waking behaviors.

—The goals of sleep disorder therapy can be reducing morbidity and excess mortality and improving quality of life for patient and family. The two primary types of complaints or disorders for which there is evidence to suggest that treatment is beneficial are the hypersomnias, primarily represented by obstructive sleep apnea, and the insomnia complaints, which can be due to a variety of psychiatric and medical disorders.

Obstructive sleep apnea is a potentially reversible cause of daytime hypersomnia, which may be associated with comorbid conditions and even excess mortality. Effective treatment can include weight loss, avoidance of alcohol, sedatives, and hypnotics, the avoidance of the supine sleeping position, and management of nasal and nasopharyngeal disease. The mainstay of treatment is the use of nasal continuous positive airway pressure (CPAP). Uvulopatopharyngoplasty has been reported to be successful when other measures have failed or are unacceptable. In all therapeutic interventions, there should be long-term outcome assessment.

Insomnia, very common in the older patient, is a symptomatic expression of a constellation of medical conditions that are not entirely related one to another. It may be of psychiatric, pharmacological, or medical origin. Since insomnia has many causes, the indications for treatment are dependent on the etiology. A thorough medical evaluation is essential prior to initiating treatment. Indications for therapy will be driven by the underlying cause and severity of symptoms. Hypnotic medications should not be the mainstay of treatment of insomnia. Short-term intermittent use of hypnotics and sedative tricyclics may be useful for temporary problems such as bereavement, dislocation, and situational anxiety. There are no studies which demonstrate their long-term effectiveness. Given the changes in drug metabolism associated with increasing age, all medications should be used with caution, especially those with long half-lives.

Other general measures, such as sleep hygiene, can be used as adjuncts to treatment of the specific causes of insomnia and tried when the cause is not clear or is unspecified. Sleep hygiene includes regularization of bedtime, generally later rather than earlier, the use of the bedroom primarily for sleeping, exercise, avoidance of alcohol and caffeine, reduced evening fluid intake, and, in the case of esophageal reflux, elevation of the head of the bed.

Free single copies of the complete NIH Consensus Statement on Treatment of Sleep Disorders of Older People may be ordered from the Office of Medical Applications of Research, National Institutes of Health, Building 1, Room 260, 9000 Rockville Pike, Bethesda, MD, 20892, phone 301–496–1143.

Births to Unwed Mothers Reached 1 in 4 in 1988

In 1988, one out of every four births in the United States was to an unwed mother, according to a new report from the National Center for Health Statistics (NCHS) on the nation's birth patterns. The total of children born out of wedlock was more than 1 million.

For whites, the proportion of such births was nearly one out of five, among Hispanics it was one out of three, and, for blacks, nearly two out of three births were to unmarried women.

The 1988 total of 1,005,299 births to unmarried women was 8 percent higher than in 1987 and 51 percent greater than in 1980. Although rates of nonmarital childbearing are highest among black women, recently the rates have been rising faster for white mothers.

Rates for women ages 25 and older have risen faster than for younger women, but the highest levels of births to unmarried mothers continue to be among women ages 18 to 24.

The overall birth rate for teenagers ages 15–17, married and unmarried, (33.8 births per 1,000 population) increased 10 percent between 1986 and 1988, to a rate higher than that for any year since 1977, according to NCHS.

The fact that the birth rate for young teenagers increased for the second year in a row after declining through much of the 1970s and 1980s is a cause for public health concern because teenage pregnancy brings increased risks for both the mother and child, NCHS officials pointed out.

By contrast, birth rates for older teens ages 18 and 19 have remained relatively stable, at about 80 births per 1,000 population, since the mid-1970s.

Birth rates for older women were up again in 1988, reflecting the continuing trend of women postponing childbearing to increasingly older ages. The birth rates for women in their thirties have risen more than 40 percent since 1975. In 1988, the birth rate for women ages 30 to 34 was 73.7 per 1,000, and the rate for those ages 35 to 39 was 27.9.

The largest annual increase of any age group was measured in the rate for women ages 40 to 44. Although the rate for this group (4.8 per 1,000) is very low, it has increased substantially in the past few years, up 9 percent from 1987 and 20 percent higher than in 1985.

In spite of the substantial increases in the birth rates of older women, they continue to be well below those for women in their twenties. Birth rates increased slightly in 1988 to 111.5 per 1,000 for women ages 20 to 24 and to 113.4 for women ages 25–29.

The proportion of mothers beginning prenatal care in the first trimester of pregnancy has shown no improvement through the 1980s and remains at 76 percent. Much of the lack of improvement in early receipt of prenatal care is associated with the increasing proportion of births to unmarried mothers who are much less likely than married mothers to begin care early.

Black and Hispanic mothers were also less likely to begin prenatal care in the critical early stages of pregnancy; only about 60 percent of them began prenatal care in the first trimester compared with 79 percent of white mothers.

In 1988, the overall rate of low birth weight (less than 2,495 grams, or about 5 1/2 pounds) remained unchanged from the 1987 level of 6.9 percent. Among blacks, however, the incidence of low birth weight increased from 12.7 percent in 1987 to 13.0 percent, the highest level since 1976 and more than twice that of most other groups. The rate for white infants fell from 5.7 percent in 1987 to 5.6 percent in 1988.

Among Hispanics, the incidence of low birth weight ranged from 5.6 percent for mothers with Mexican and Central and South American backgrounds to 9.4 percent for those of Puerto Rican origin. Among Asiatic or Pacific Island Americans, the percent of low birth weight varied from a low of 4.7 for those of Chinese ancestry to 7.1 for those from the Philippines. Low birth weight was reported for 6.1 percent of American Indian births. Low birth weight is the single most important factor associated with infant mortality.

Copies of "Advance Report of Final Natality Statistics, 1988" are available from the National Center for Health Statistics, Scientific and Technical Information Branch, 6525 Belcrest Road, Hyattsville, MD, 20782; telephone (301) 436-8500.

New Drug for Infant Respiratory Distress Syndrome Approved by FDA

The Food and Drug Administration has approved a drug that may save thousands of premature infants born with an often fatal breathing difficulty, respiratory distress syndrome.

In 1963, a baby boy born to President and Mrs. John F. Kennedy died of the condition.

The drug comes as a powder to be mixed with sterile water and then given through a tube into the windpipe. It goes to the lungs where it substitutes for a naturally occurring surfactant—a foamy substance that coats the inside of the lungs and keeps them from collapsing when the infant exhales. The premature infants must be on a mechanical ventilator to receive the drug.

Although in the past two decades great strides have been made against the syndrome, it remains a leading cause of death and disability among premature infants. Among about 250,000 infants born prematurely each year in the United States, up to 50,000 have the condition, which kills about 5,000.

The surfactant can be administered in up to 3 doses starting immediately after birth to help prevent death in high-risk infants under 1,350 grams (3 pounds) or in 2 doses, 12 hours apart, to treat infants who have developed the disease.

Burroughs Wellcome Co. of Research Triangle Park, NC, will distribute surfactant under the trade name Exosurf Neonatal. Exosurf was invented by Dr. John Clements of the University of California at San Francisco and licensed to Wellcome. The product was also designated an "orphan drug" by FDA, under a program which provides incentives for development and production of drugs and other medical products to treat conditions affecting small numbers of persons.

Because of its importance, the drug was made widely available, while still experimental, in July 1989 under FDA's Treatment IND program. The new drug application to market the drug was received in February and approved by FDA in a near-record 5 months.

Johnson-HUD Funds Provided for Homeless in 9 Cities

Nine cities will receive joint funding from the Robert Wood Johnson Foundation of Princeton, NJ, and the U.S. Department of Housing and Urban Development (HUD) to provide health and social services as well as housing for homeless mothers and children.

A total of $52.4 million in foundation grants and more than $538 million in rent subsidy certificates over 5 years from HUD are expected to help the cities reorganize their service delivery systems so that homeless families can have easier access to health and social services programs as they are placed in housing.

The cities include Atlanta, Baltimore, Denver, Houston, Nashville, Oakland, Portland, OR, San Francisco, and Seattle. They plan to focus their efforts on young homeless mothers who need assistance for substance abuse and mental illness. It is estimated that most homeless families consist of a single mother and two or three young children.

The Oakland project is also supported by three area foundations: the William and Flora Hewlett Foundation, the Henry J. Kaiser Family Foundation, and the San Francisco Foundation.

"Many homeless mothers need psychiatric and substance abuse treatment. Their children often do not receive regular medical care and are not immunized, resulting in high rates of illness and

chronic disorders. This program will help combine needed services with housing," said Steven Schroeder, MD, Johnson foundation president.

Johnson has had two other similar initiatives: the Program on Chronic Mental Illness, also jointly funded with HUD, which supported communitywide projects aimed at consolidating and expanding services for people with chronic mental illness, including housing supported with rent subsidies; and the Health Care for the Homeless Program which supported health care delivered in soup kitchens, shelters, and other areas where the homeless live.

The Homeless Families Program is directed for the foundation by James O'Connell, MD, instructor at Harvard Medical School and is co-directed by Julie Hardin, a former regional director for the Massachusetts Department of Mental Health.

Proceedings of Conference on Community-Based AIDS Care Available

As the nature of acquired immunodeficiency syndrome (AIDS) changes from an acute, rapidly fatal condition to one with a chronic and relapsing course, care outside of hospitals and nursing homes may become more appropriate for larger numbers of patients.

Because there is little information on community-based care of AIDS patients, a conference was convened at the University of Minnesota on August 14–15, 1989, to begin developing a research agenda on the subject.

Researchers, home care providers, administrators, caregivers, and others with diverse backgrounds and affiliations addressed a wide range of questions, according to conference chairman Joseph M. Keenan, MD, Assistant Professor and Director of Geriatrics and Home Care, at the University of Minnesota.

Among them were does community-based care of persons infected with the human immunodeficiency virus (HIV) improve clinical outcomes? Is it more cost effective than institutional care? How should it be financed and organized? What are its effects on caregivers? How can quality of care be ensured? How should community-based services be coordinated to be most effective? For which patients is community-based care most appropriate?

Proceedings of the conference, which was cosponsored by the Agency for Health Care Policy and Research (AHCPR) and the Health Resources and Services Administration, both of the Public Health Service, and the University of Minnesota, are now available. The 181-page document is divided into sections on caregiver issues, settings of care, public policy concerns, ethical issues, and research design. An appendix summarizes the postconference workshop, "Principles of Collaboration Between Community-Based Organizations and Health Services Researchers."

—WILLIAM LEVEE, Writer-Editor, Agency for Health Care Policy and Research.

Copies of "Community-Based Care of Persons With AIDS: Developing a Research Agenda," DHHS Publication No. (PHS) 90–3456, are available from the AHCPR Publications and Information Branch, Room 18–12, 5600 Fishers Lane, Rockville, MD, 20857, telephone (301) 443–4100.

Mental Health Revenue, Expenditures Rose in 1986

Expenditures by mental health organizations rose from $145 billion in 1983 to $18.5 billion in 1986, an increase of 28 percent.

Funding received by mental health organizations in 1986 totaled $19.6 billion. Of this total, $7.9 billion (41 percent) was provided by State governments. Direct Federal funds plus Medicare and Medicaid provided some $4.8 billion, or about one-fourth of total funding. Client fees (including private insurance) provided an additional $4 billion or 21 percent.

The National Institute of Mental Health's "Expenditures and Sources of Funds for Mental Health Organizations: United States and Each State, 1986" examines the expenditures and sources of funds of mental health organizations both nationally and by State for the latest year for which data are available. Its authors also analyzed whether recent increases in spending are relative to inflation and whether major funding or expenditure shifts have occurred since 1983 among the various types of mental health organizations.

The data were obtained from the Inventory of Mental Health Organizations and General Hospital Mental Health Services conducted in November 1986 by the Survey and Reports Branch, Division of Biometry and Applied Sciences, National Institute of Mental Health, with cooperation from the State Mental Health Agencies and the American Hospital Association.

Single copies of this publication may be obtained from Information Resources and Inquiries Branch, National Institute of Mental Health, 5600 Fishers Lane, Room 15C–05, Rockville, MD, telephone 301–443–4515.

Nonexperimental Data Interpretation Examined in New Publication

In response to an ever-increasing demand for empirical data for developing effective public policies to cope with health care issues, the Public Health Service's Agency for Health Care Policy and Research (AHCPR), under grant HS05306, sponsored a national conference in 1987 in Tucson, AZ.

Cochaired by the University of Arizona's Lee Sechrest, PhD, and Barbara Starfield, MD, of Johns Hopkins University, the conference explored small-area analysis and medical care outcomes, the role of meta-analysis in strengthening causal interpretations of nonexperimental data, latent variable structural methods for separating specific from general effects, and other issues.

These and other methodological approaches are discussed in feature articles and followup comments in a new 230-page report of the conference published by AHCPR. Papers include a presentation by Northwestern University's Thomas D. Cook, PhD, the conference keynote speaker, and articles by Mark W. Lipsey, PhD, Claremont Graduate School; Peter M. Bentler, PhD, University of California; William H. Yeaton, PhD, Institute for Social Research; John E. Wennberg, Dartmouth Medical School; and others.

—MARY L. GRADY, Center for Research Dissemination and Liaison, AHCPR.

Single copies of the proceedings, "Research Methodology: Strengthening Causal Interpretations of Nonexperimental Data," DHHS Publication No. (PHS) 90–3454, are available free of charge from the Agency for Health Care Policy and Research, Room 18–12, 5600 Fishers Lane, Rockville, MD 20857, telephone (301) 443–4100.

No Smoking Policy in Virginia Jail Believed to Reduce Health Problems

One year after a smoking ban took effect at the Fairfax County (VA) Jail, inmates are reporting far fewer health problems, according to Sheriff Carl R. Peed.

During August 1989, while the smoking ban was being phased in, 2,200 inmates visited sick call at the jail. Recently sick call visits have been running between 1,200 and 1,400 per month, a decrease of between 36 and 45 percent.

"It used to he that we would run a sick call everyday, sometimes twice a day," Peed said. "Then around October, after we began cutting back on the number of cigarettes inmates could have, our medical staff began to see less eye irritations, less throat infections, and less upper respiratory problems."

Although the decrease in health problems has been linked to the antismoking policy, Peed admitted, "We have no proof, we have no guarantee that the reduction in sick call visits is due to the [smoking ban]."

The policy against smoking in the jail was initiated in July 1989, when the inmates were gradually required to cut back their cigarette consumption. Beginning last January, smoking was forbidden entirely in the jail.

"A lot of people from other jails around the country have heard about [the smoking ban] and they've called and asked how we did it without having a riot," said sheriff's department spokesman Lt. James Vickery.

"I think the most important thing we did was to tell the inmates it was coming," he added.

In addition to the apparent health benefits, the jail has also become a cleaner, safer place to live and work, according to Vickery.

"Before, you couldn't walk around without stepping in cigarette ashes," he said.

In addition, Peed said, there have been no so-called "nuisance fires" set by inmates since the total ban was enforced in January. Before the ban, the jail averaged about 17 nuisance fires and fire-related incidents per month.

Fire is the biggest safety threat in a jail because escape routes for inmates and staff are restricted. "Its like a death trap," Peed said.

Limiting smoking to designated areas would have been ineffective, Peed said, because the jail's ventilation system circulates air throughout the building.

Peed said jail workers, who have been forbidden from smoking on the job since 1984, pushed for the antismoking policy. "The employees began to question having a nonsmoking policy for employees when the prisoners were still allowed to smoke."

Critics of the new policy argued that the smoking ban would result in riots and unrest among the inmates, but Vickery said there were few problems.

"When you're an inmate in a jail, your freedom is limited for a lot of reasons," Vickery said. "This is just another way we can control their environment."

Based on the success of the Fairfax County policy, Peed said, other jails are following suit.

"We feel like it was the beginning of a trend for the nation," Peed said.

—DAVE MOAK, Reporter, Sun Gazette, Great Falls, VA. Reprinted with permission from the Sun Gazette, June 21, 1990.

173 Communities Honored for Projects that Address Citizens' Health Problems

The 1990 Community Health Promotion Awards were earned by 173 communities in 50 States, the District of Columbia, and 4 Territories. These communities were recognized for efforts to improve the health of their citizens. Of the 173, 32 were especially acknowledged for excellence.

"These projects provide tangible evidence that communities can address successfully major health problems. I am especially pleased that many of these programs reflect a sensitivity for special populations including the elderly, ethnic minorities, and the economically disadvantaged," said Secretary of Health and Human Services Louis W. Sullivan, MD, as he announced the awards.

The community projects addressed such problems as alcohol or drug abuse, smoking, lack of exercise, obesity, teenage pregnancy, accident or injury prevention, home safety, hypertension, and heart disease.

Nominations for the Secretary's Community Health Promotion Awards resulted from reviews conducted by 50 State health departments. They forwarded 173 nominations, which were reviewed by representatives of the Department of Health and Human Services. The 32 programs that were especially recognized were selected on the basis of further reviews conducted by representatives of five Public Health Service agencies.

The 32 communities are Phoenix and Tucson, AZ; Pleasant Hill and San Francisco, CA; Denver, CO; Atlanta, GA; Idaho Falls, ID; Chicago and Springfield, IL; Indianapolis, IN; Warren, MI; Hattiesburg, MS; Grand Island, NE; Zuni, NM; Bronx and Rochester, NY; Greenville and Hendersonville, NC; Cleveland, Summit County, and Toledo, OH; Anderson, SC; Fort Thompson and Vermillion, SD; Blountville, TN; Fort Worth and El Paso, TX, Park City, UT; Marion, VA, Clarksburg, WV, and Monroe, WI.

Secretary Sullivan also honored seven community leaders or volunteers for their effort in promoting health and advocating healthy behaviors in low-income or minority communities. Awards for Community Leadership were given to Phyllis Albert, Zuni, NM; Jan Marie Belle, Denver, CO; Dazon Dixon, Atlanta, GA; Timothy Neylon, Chicago; Adelaide Pence, Clarksburg, WV; Bettie Ross, Hattiesburg, MS, and Adele Corvin, San Francisco, CA.

Secretary Announces 1991 Competition for Students of the Health Professions

Secretary of Health and Human Services Louis W. Sullivan, MD, has announced the ninth annual national competition among students of the health professions for innovations in health promotion and disease prevention.

The 1991 competition is open to students enrolled in baccalaureate or higher degree programs affiliated with the Federation of Associations of Schools in the Health Professions, cosponsors of the competition.

Entries will consist of a 2,500-word proposal, an abstract, and a cover sheet endorsed by the appropriate dean or a designated faculty member. Information on the competition may be obtained from the dean or the program head at the participating schools. The deadline for submission of entries to the educational institution is March 15, 1991.