TRENDS & Ideas

COMMUNITY HEALTH

Three-Part Program Promotes a Healthy Environment

Trenton, NJ, is beset by community health problems. The infant mortality rate and the teenage pregnancy rate are both higher than the state average; one out of every five births is affected by drug abuse; and African Americans are nearly twice as likely as African Americans in other parts of the state to have heart disease. The city's minority and elderly populations are less likely than other groups to receive proper medical care because of lack of access and services.

St. Francis Medical Center in Trenton has responded by developing Health Ministries, a three-part program that works to promote a healthy community. Health Ministries includes Healthy Connections, which provides health services and education to children and families, the Faith in Action Respite Program, and parish nursing.

In the Healthy Connections program, St. Francis student nurses teach a semester of weekly health classes for grades 1 to 8 in four inner-city parochial schools. Topics include personal hygiene, self-esteem, and conflict resolution. The program also sponsors full-day school health fairs.

The Faith in Action Respite Program provides in-home respite care for caregivers of people with memory disorders. Volunteers complete a training program conducted by the St. Francis Medical Center Community Services Department.

The parish nursing program focuses on wellness and the prevention of illness through health counseling, education, and referrals to community resources. Nursing staff members of the St. Francis Community Services Department serve as consultants to parish health ministers and help them develop parish or congregation nursing programs specifically tailored for their needs. To date, 11 congregations have been served.

Information provided by Sr. Anita Cattafesta, OSF, vice president of mission and ministry, St. Francis Medical Center, Trenton, NJ.

TECHNOLOGY

No More Needles?

Since the introduction of the hypodermic syringe in 1845, injections have been an inexpensive and efficient, albeit painful, way to administer drugs. But David Stipp, writing in Fortune, reports that new drug-delivery technologies may make needles a thing of the past. In the next few years–and as soon as 1999–alternatives to needles should be available, including vaccines in nasal sprays, pills for drugs that until now have been injected, and medicine inhalers.

Attempts to find alternative ways of getting drugs into the bloodstream have included ointments, which have not had much success, and transdermal patches, which work with drugs made up of compact molecules that easily penetrate the skin, such as nicotine. Getting larger molecules through skin, however, has proven more difficult.

One promising avenue is to formulate these "macromolecular" drugs into fine powders and administer them through the lungs. One new inhalant device uses a puff of compressed air to force the patient's inhaled dose deep into the lungs, where the particles can pass into the bloodstream. Studies have shown that diabetic patients taking insulin with this device can control their blood glucose levels as safely as they can with injections. Also in development are inhaled medicines for osteoporosis and inhalers for morphine to treat sudden, intense episodes of pain, such as those suffered by cancer patients.

One of the first alternative technologies to be widely used will likely be a nasal spray influenza vaccine, which is expected to be available in the fall of 1999. The spray uses "attenuated" live viruses–enough to trigger the immune system but not enough to cause illness. And because of the development of chemical "carriers" that bind to drug molecules and form structures that can cross cells' membranes, it may soon be possible to take orally drugs that now are only administered by injection.

Illustrations by Sim Gellman

EMPLOYMENT

Forecasting Healthcare Jobs in 2005

How many physicians will U.S. healthcare require in 2005? Physician assistants? Nurse practitioners? An instrument developed by the Department of Health and Human Services now enables employers to make some predictions, writes Josh Galper in *American Demographics.*

Government spending is by far the biggest factor in the growth (or lack of it) in healthcare employment, says Galper. The instrument–called Integrated Requirements for Physician Assistants, Nurse Practitioners, Certified Nurse Midwives, and Physicians–bases its forecasts on six possible spending scenarios.

• *Status Quo* If spending remains basically as it is now, by 2005 the nation will need 10 percent more physicians, 11 percent more physician assistants (PAs), 12 percent more nurse practitioners (NPs), and nearly 2 percent more certified nurse midwives (CNMs).

• *Baseline Insurance Projections* If government spending remains the same and the market determines changes in insurance rates, the nation will need nearly 12 percent more physicians, 15 percent more PAs and NPs, but .3 percent *fewer* CNMs.

• *High Managed Care* If an increasing proportion of people become enrolled in managed care, the United States will need about 20 percent more PAs and NPs, 12 percent more physicians, and 1.4 percent fewer CNMs.

• *Universal Coverage* If the nation were to mandate universal coverage, it would require 20 percent more physicians, nearly 31 percent more PAs, 21 percent more NPs, and nearly 10 percent more CNMs.

• *Equal Access Under Universal Care* Under this scenario–which assumes even greater government intervention–the nation would need nearly 23 percent more physicians, 33 percent more PAs, nearly 24 percent more NPs, and nearly 12 percent more CNMs.

• *High NP, PA, and CNM Use* If people were to begin visiting these professionals rather than the traditional physician, the nation would need 2 percent fewer doctors, 130 percent more NPs and PAs, and 99 percent more CNMs.

• *No Private Insurance* In this scenario, which Galper added, if private insurance were to end and healthcare costs had to be paid by either the government or the patient, the nation would need 22 percent more NPs, 10 percent fewer CNMs, 8 percent fewer PAs, and nearly 14 percent fewer physicians.

LONG-TERM CARE

Older Cancer Patients in Pain

Many elderly cancer patients in nursing homes receive insufficient medication for their pain, according to a study conducted by Roberto Bernabei, MD, et al., and described in *JAMA.*

Bernabei and his colleagues studied 13,625 cancer patients in long-term care centers in five states. The patients were all 65 or older, had been admitted to the centers following cancer treatment in hospitals, and had Medicare coverage that included medication costs.

Not all of these patients reported daily pain, the researchers found. Of those who did, 16 percent were given a nonnarcotic medication (aspirin, for example), 32 percent were given a weak opiate (codeine and others), and 26 percent were given a strong opiate (morphine and others). But the other 26 percent–more than a quarter of the total–received no painkiller at all.

Gender, age, and ethnic and racial background were factors apparently influencing these decisions, Bernabei and his colleagues discovered. Their study showed that:

• Women were more likely than men to have their pain reported and receive medication for it. This, the researchers speculated, is because women generally know more about pain and its management.

• Patients older than 75 were less likely to get pain medication than those who were younger. This may be in part because older people tend to be both less knowledgeable about pain management and more fearful of possible addiction, the researchers said.

• Minority patients–especially African Americans–were less likely than nonminorities to receive medication. Hispanics in particular tend to fear overmedication, the researchers noted, and language barriers probably keep some minority members from reporting pain. But the researchers admitted they had no data satisfactorily explaining this finding.

Bernabei and his colleagues noted that U.S. physicians generally get less training than other physicians in detecting and treating patients' pain. The researchers expressed concern that, as long-term care centers increasingly admit patients formerly treated in acute care hospitals, those patients are likely to get even less relief from their pain.