

Boston University

OpenBU

<http://open.bu.edu>

BU Publications

BU Medical Center: Press Releases

1990-07

Immediate release: July 1990

<https://hdl.handle.net/2144/26358>

"Downloaded from OpenBU. Boston University's institutional repository."

Immediate

Release

News tips for Science Writers from:

Boston University School of Medicine/School of Public Health and the University Hospital

July 1990

The Economics of AIDS Care

The yearly cost of treating AIDS patients is not as expensive as was initially feared, but because of improved survival, the overall lifetime cost of treatment has increased 24 percent, according to a study in the July issue of the *American Journal of Public Health*. Researchers from Boston University School of Public Health (BUSPH) and Boston City Hospital (BCH) performed a two-year study of the costs of treating 240 AIDS patients, or 55 percent of all cases in Massachusetts during that period.

"The yearly cost of treating AIDS patients was decreasing even before the advent of the drug AZT," says George Seage III, M.P.H., an epidemiologist at BUSPH and BCH. "This is due in part to a decrease in the average length of stay per hospitalization and changes in the care of patients."

The researchers found that the mean cost of medical care for AIDS patients was \$37,404 per year. "Originally it was thought that the treatment of AIDS patients would cost between \$150,000 and \$200,000, which is comparable to the cost associated with organ transplantation," says Seage. "Instead, we found that the cost of treating AIDS patients is between \$30,000 and \$40,000, which is comparable to the costs of other chronic terminal illnesses, such as rectal and breast cancer."

Seage says AZT has probably decreased the cost even further. "Although AZT is expensive, that cost may be offset by decreases in hospital length of stay and a reduction in the incidence of opportunistic diseases."

Although the cost of treating AIDS patients is decreasing, Seage says that the disease is still stressing the health-care system. "The health-care system could probably absorb the costs of AIDS treatment if it were not concentrated in certain urban areas, which have difficulty covering the costs, while other areas are not as severely affected."

Refinement of Treatments for Testicular Cancer

Today, 80 percent of men who develop the most malignant form of testicular cancer can be cured, compared with only 10 percent 15 years ago. Now researchers are using prognostic models to refine the treatments and minimize their side effects. An article in the July issue of *Urology* summarizes the current state of this research.

Testicular cancer is one of the most common cancers in men aged 15 to 34. Nonseminomatous cancer, the most common subtype, has been the hardest to treat.

Prognostic models are models of symptoms, laboratory studies, related factors and treatments—developed through retrospective studies—that can help predict the effectiveness of a treatment at each stage of a disease.

"The goal of this prognostic-model research is to refine treatment decisions to select the most appropriate treatment for individual patients," says Paul Hesketh, M.D., a University Hospital medical oncologist and an author of the article.

One of the most important modifications in the treatment of testicular cancer made possible by prognostic-model research involves the management of early-stage cancer, which is confined to the testes. Traditionally, such patients were treated by removal of the testes followed by surgery on the abdominal lymph nodes. Now, because prognostic studies indicate that lymph-node cancer rarely develops following testes removal, the majority of these patients can be treated by removing the testes and then monitoring them closely, thus eliminating the possible complications of a second major surgery.

(more)



Boston University School of Medicine/School of Public Health and the University Hospital
Office of Media Relations, (617) 638-8491
720 Harrison Avenue, Suite 909
Boston, MA 02118-2393

Vitamin D Deficiency in the Elderly a Major Health Concern

Vitamin D deficiency is a major health concern for the elderly, according to a recent study in the *American Journal of Clinical Nutrition*. Researchers at Boston University School of Medicine (BUSM) and the Hebrew Rehabilitation Center for Aged (HRCA)/Harvard Research Nursing Home found that nearly 80 percent of the elderly residents who lived in a Boston-area long-term care facility suffered from vitamin D deficiency in the winter, making them more susceptible to osteomalacia—adult rickets—and increasing their risk for hip fractures.

According to Michael Holick, Ph.D., M.D., the principal investigator of the study and the director of the Vitamin D, Skin and Bone Research Laboratory at BUSM, both the elderly residents of the facility and the more mobile tenants of HRCA-sponsored complexes who relied on vitamin D production from sunlight exposure suffered from vitamin D deficiency by the end of the winter. During the winter months (when the sun's rays are filtered at a more slanted angle due to latitude), ultraviolet radiation is not sufficient for vitamin D synthesis to occur.

During the summer months, the less mobile elders of the long-term facility who received minimal sunlight exposure did benefit from the exposure, but were still somewhat vitamin D deficient compared to the more mobile tenants.

In addition, Holick found elders who relied solely on their diets for vitamin D were also deficient. "Due to an intolerance to or dislike of milk, many elderly people have a low dietary supply of vitamin D," says Holick.

Holick adds: "These findings should concern all elderly people living in a temperate climate—not just those in nursing homes—who, because of their advancing age, already suffer from a decrease in bone mass and are more susceptible to falls and fractures."

Protection Against Lyme Disease

Although Lyme Disease (LD)—a form of arthritis that is transmitted to humans via deer ticks—is now the most commonly reported tick-borne illness in the country, it can be cured if treated early with antibiotics.

LD is caused by the bite of a particular type of tick, which deposits the germ—spirochete—into the skin of the victim. A person bitten by a tick may develop a characteristic red rash at the site of the bite. Mild symptoms, such as a low-grade fever and muscle aches, may develop. At this point, treatment with the antibiotic tetracycline will cure the disease.

"If not recognized and effectively treated early, the disease may develop into generalized arthritis that can progress to many joints and last many months or even years," says Robert Simms, M.D., the director of Fibromyalgia Research at the University Hospital. "LD not only affects the joints, but can also affect internal organs, including the heart, brain and nerves," he adds. At this later stage, large doses of intravenous penicillin or other antibiotics may be successful in achieving a cure.

Simms has these suggestions for persons who are bitten by a tick:

- Cover the tick with a few drops of a thick oil, such as olive or mineral oil, to suffocate and immobilize it. Kerosene or gasoline also may be used.
- Gently remove the tick with a pair of tweezers, making sure you remove the entire tick.
- Carefully wash the bitten area, your hands and the tweezers with soap and water. Apply alcohol or hydrogen peroxide to the area and cover it with a sterile bandage.
- Consult a physician to see if further treatment is advised.