

BIOMEDICINE

Mary-Sherman Willis reports from Washington at the annual meeting of the American College Health Association

The myth of the female athlete

The myth has been circulating ever since Title IX opened the doors to female athletes and guaranteed women equal opportunity in the classroom and on the athletic field. Women athletes are much more injury-prone than their male counterparts, researchers and trainers have warned. Any but the most genteel sport could "scar women for life," cause sterility and breast cancer, broken bones and bulging muscles.

Not so, says surgeon Christine E. Haycock. The injuries of women athletes are essentially no different from those of men. Bruises, ankle injuries, and knee injuries are the most frequent, she says. More women get hurt playing basketball, probably because it is the most popular sport.

Haycock conducted her own studies of sports injuries among women in 1975. Despite the increasing number of women athletes, the number of injuries has decreased. This is probably because the athletes are in better physical condition, she said. Women now have coaches "who really know their beans."

Safer playing fields and better equipment are also necessary. Hip pads used by hockey goalies, for instance, are not contoured to fit the female hips. The pads slide up and bruise the player's ribs. Gymnastic parallel bars should be padded to prevent pelvic bruises, Haycock said.

Some of the least common injuries she found were those to the breasts and to the reproductive organs, "which are far better protected [in a woman] by the pelvic bone and the spine than the male's are."

Wholistic care with a 'W'

Twenty-four-year-old "Mary" recently had an abortion. She has been depressed ever since and has developed a chronic bladder infection. She has come to the Wardenburg Health Center to have her infection treated but she will get much more than a physical exam and a few pills.

The health center, located at the University of Colorado at Boulder, is the first in the United States to sponsor a Wholistic Health Care Project. When "Mary" walks in she will be met by a nurse who will ask her detailed questions about how she lives and about her self-image. She and the nurse will then go into conference with a counselor and a physician. The four of them will plan "Mary's" treatment, based largely on her own suggestions. It may include counseling as well as medication.

The strength of the wholistic approach to preventative health care is its success with patient compliance to treatment, says Bill Peterson, National Program Director for Wholistic Health Care Centers, Inc. Less than half the patients consulting a physician will actually follow his recommendations. But from 70 percent to 90 percent will follow a treatment plan under the team approach of the Wholistic system, he says.

The service is expensive to provide, and the cost to the patient is usually about \$30. But the long-term costs will decrease, Peterson says. "It's in the nature of preventative medicine; the more you do successfully, the less happens."

NGU: The most common VD

Nongonococcal urethritis (NGU) has surpassed gonorrhea as the most common venereal disease in the United States and Great Britain. The symptoms are similar to those of gonorrhea, but, until recently, no virus had been implicated in NGU. Attention is now focusing on *Chlamydia trachomatis*, a unique parasitic bacterium that can be traced to conjunctivitis and pneumonia in the newborn children of mothers with NGU, according to Julius Schachter, epidemiologist at the University of California at San Francisco.

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SPACE SCIENCES

Mutch named new NASA science chief

In a time when the U.S. space program is being increasingly criticized for lack of specific long-range goals and for giving short shrift to science and exploration, the National Aeronautics and Space Administration's newly named top science official is a man who has been in a position to experience widely differing climates for space science.

On July 1, Thomas A. Mutch of Brown University in Providence, R.I., will become the new NASA Associate Administrator for Space Science, replacing Noel W. Hinners, who resigned March 31 after holding the post for five years. Mutch has been a major contributor to NASA science programs since 1969, when he became a member of the Lunar Science Review Board in the same optimistic year that the first Apollo moonrocks reached the earth; also in that year, he became leader of the Viking Mars project's lander imaging team.

Mutch is coming to his new post, however, in a period when, despite the Viking, Voyager and Pioneer spacecraft now studying various planets, there is only a single NASA planetary mission under development (the Galileo orbiter and probe of Jupiter, scheduled for the mid-1980s). Mutch himself, furthermore, in recent years has seen substantial funding cuts from NASA committees studying possible post-Viking exploration of Mars — committees of which he was chairman.

Mutch's new job will involve coordinating the planning of future planetary missions and other space-science activities such as ground-based research. In addition, however, it will include dealing with legislators who must fund such projects, as well as with the scientists who depend on the resulting data. Opinions about future prospects for planetary science range from optimistic (the White House) to bleak (many of the scientists). The associate administrator could affect the balance.

European comsat agreement signed

The European Space Agency and the Interim Eutelsat Organization (a group including the telecommunications administrations of 17 countries) have signed an agreement to provide Europe with its own regional satellite communications system, to be developed during the 1980s. The ESO will manage the system, for which ESA will provide the satellites.

The plan calls for two satellites to be in orbit at the same time, with one serving as a back-up for the other. They will be placed in geosynchronous orbit between 10°E and 12°E longitude, with the capability of carrying up to 12,000 telephone conversations and two television channels. The first satellite is to be launched in late 1981 (by the European Ariane rocket rather than using the U.S. space agency as a launch service), with the second scheduled for about 10 months later. In the decade covered by the agreement, ESA plans to purchase five satellites (built by MESH — yet another multi-nation European consortium) to meet the system's needs.

The agreement was signed almost exactly a year after the launching of ESA's Orbital Test Satellite, whose operations and technologies are precursors to the coming system. OTS has been providing telephone, television and data-link services, as well as information from a series of signal-propagation experiments. Its operations began with ground stations in Italy and France, followed by others in Germany and the United Kingdom, as well as eight smaller two-way stations and 30 receive-only terminals. Besides experiments confined to western Europe, tests have included television transmissions from Europe to both Egypt and Turkey, and there are plans for regular TV transmissions from France to Tunisia. OTS appears healthy enough to exceed its original three-year design lifetime, ESA reports, and there is enough attitude-control gas left on board to double that span.

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