

only out of sympathy with that but has formulated a National Chimpanzee Breeding Plan. Now that chimps can no longer be gotten from Africa, NIH wants to promote the establishment of a self-sustaining captive breeding population among the 1200 chimps kept by U.S. biomedical research institutions.—**CONSTANCE HOLDEN**

## Hospices Compared with Conventional Care

Preliminary findings are now available from the 3-year National Hospice Study, the first comprehensive attempt at evaluating hospice care in the United States. The results may come as something of a surprise to those who believe a hospice offers a distinctly superior alternative to conventional hospital care when it comes to the well-being of terminal cancer patients and their families.

According to principal investigator David S. Greer of Brown University, who presented the findings at the Institute of Medicine annual meeting on 26 October, there were no significant differences in patient reports about their quality of life and satisfaction with care between hospice patients and those in conventional care. However, costs were less for patients in home-care programs.

The Brown group compared 14 hospices with a similar number of community oncology centers. The "best and most experienced" providers were selected, according to project director Vincent Mor. The hospices were divided into home care and hospital-based, which included one of the country's four freestanding inpatient hospices.

Many more of the patients in conventional hospital care were subjected to diagnostic tests and intensive interventions in the final weeks of life, including surgery, radiation, and chemotherapy. Reports from patients' "principal care" people indicated that the hospital-based hospices achieved better control of pain than either of the other two models, although patient self-reports (frequently impossible to elicit) showed no difference.

As for intangibles, Greer reported that patients' "social quality of life" was uniformly high and slightly better

when they were cared for in the hospital system. No significant differences were found in measures of perceived health, outlook, emotional well-being, functional performance, and "patient awareness." Sixty-two percent of the patients treated at home died at home, compared with 20 percent of those in hospital-based hospices.

Cost differences were significant: Overall costs for home-based patients were \$4758 compared with \$5890 for inpatient hospices. No comparable figure was supplied for conventional care where costs may average \$1000 in the final week.

Some of the findings are likely to be controversial when the report becomes available. Louise Bracknell of the National Hospice Organization says it is very difficult to evaluate hospices at this point in their development because so few as yet can offer the complete array of services.

The Consumers Union's Institute for Policy Research has recently completed an in-depth survey of 41 families of deceased patients, half of whom had hospice care. Sociologist Margaret Gold says she questioned families about aspects of care such as pain relief, personal care of the patient, communication with doctors, the patients' emotional well-being, and family cohesiveness. The respondents, she says, felt all these were handled much better in hospices, whether hospital- or home-based. She also questioned the validity of some of the responses in the Brown study: patients, she says, are unlikely to express dissatisfaction with care givers on whom they are so dependent; besides, those in conventional care are unlikely to complain when they assume they are getting the best money can buy.

Greer himself expressed some misgivings as to whether his study was uncovering the full picture. Said he "... there may be something going on there which is not measurable utilizing current techniques ... and may not even be describable except by the best of our poets. I leave most hospices inspired"—but also concerned that "the advent of regulation, the entry of reimbursement, and the professionalization which seems inevitable may destroy those elusive elements which are so emotionally and spiritually uplifting."

—**CONSTANCE HOLDEN**

## Scientists Endorse Ban on Antibiotics in Feeds

It is quite a feat to get 300 scientists from diverse backgrounds to agree on anything, even more remarkable to have them agree on a strong public policy measure which has been pending in the bureaucracy and in Congress for a decade. But a recent petition drafted by the Natural Resources Defense Council (NRDC) does just that. The petition, released on 24 October by NRDC staff scientist Karim Ahmed, is a restrained but urgent letter to President Reagan and the secretary of Health and Human Services, asking for a quick ban on "sub-therapeutic uses of penicillin and tetracycline in livestock feeds." The Administration is considering expanding the use of drugs in feeds.

An attached statement endorsed by 300 scientists supports the plea and points out that the overuse of these drugs is weakening their value as tools to fight human disease. The endorsers include many academic department heads, scientists at government laboratories and private cancer research centers, and officials at biotechnology companies such as Cetus and Biogen. The authors note that other compounds can be used to promote growth, but that there are no substitutes for these drugs as weapons against disease. "The effectiveness of these two antibiotics is a national resource that no country can afford to compromise," they conclude.

For at least a decade it has been clear that the use of antibiotics as growth promoters has the detrimental side effect of speeding the evolution of drug-resistant bacteria on the farm. Microbiologists have worried that this resistance factor could be transferred from bacteria that infect animals to those infecting humans. The federal Food and Drug Administration in 1978 proposed tighter controls on the most important drugs in feeds, penicillin and tetracycline. But the cattle, feed, and drug industries fought these controls on the grounds that the cross-over potential had not been proved. Now it has, in research conducted by Thomas O'Brien at Harvard University Medical School and published in 1982. Ahmed writes, "further delay is unconscionable."—**ELIOT MARSHALL**