

*Disciplinary Measures Taken by the Nepalese Government.* Four expeditions have been disciplined by the Nepalese government for having made illegal climbs. These were the Poles for having climbed the middle peak of Kanchenjunga, the Spaniards who had permission for Yalung Kang for having attempted the same peak of Kanchenjunga, the Japanese who had permission for Nampa for having climbed Jetiboburani and the Japanese who had permission for Himal Chuli for having climbed the west summit instead. The members of these parties will not be allowed to enter Nepal for three years and may not climb there for five.

*The Himalayan Rescue Association (HRA)* of Kathmandu, Nepal, operates a medical aid post in the village of Pheriche (13,920 feet), an eight-hour walk from the Mount Everest Base Camp. Since 1973, it has been providing medical care to trekkers, climbers, porters, and local inhabitants, and since 1975 has been doing research on various aspects of high-altitude illness. It is a volunteer organization financed by donations, small fees for services, and recently by his Majesty's Government Ministry of Tourism. Tokyo Medical College built the present facility at Pheriche, and it is staffed by volunteer doctors from around the world.

The HRA's activities have had a major impact in the Everest area, reducing the number of deaths, emergency evacuations, and ruined trips due to high-altitude illness. In the two-year period from 1975 to 1977, for example, the incidence of acute mountain sickness (AMS) decreased from 69% to 43%, and the number of deaths from AMS declined steadily from five in 1974 to none in 1977. At the same time, the total number of trekkers has increased. (In 1978, however, an expedition doctor died of severe AMS-pulmonary and cerebral edema—without ever having gone above Base Camp.)

The key to this success has been a prevention program based on original research done at Pheriche. Preventive measures include slower ascent, high fluid and carbohydrate intake, and especially the use of "acclimatization days." The HRA now recommends one such day, where sleeping altitude is not changed, for every 3000-foot gain in altitude, starting at about 9000 feet. The other important factor is to recognize signs and symptoms of AMS early, and to know when to stop the ascent or to descend. This information is now available in multi-language pamphlets at numerous places along the trail, and from the staff at Pheriche as well.

In addition to preventing and treating AMS, the HRA has become well known for its research activities. For example, researchers at Pheriche were the first to determine the true incidence of AMS in trekkers, to show that AMS is just as common in women as men, to study the problem of peripheral edema at altitude, to show that acetazolamide (Diamox) prevents AMS in trekkers to Everest, and to show that Diamox can be used effectively to treat mild cases of AMS. They were

also the first to document a reduction in AMS due to a preventive education program. Dr. Peter Hackett, the director of medical research for the HRA, was awarded a research grant from the American Alpine Club in 1977. Together with Hamish MacInnes of Scotland, the grant helped them design and produce the world's first high-pressure chamber for treatment of AMS. It is now operational at Pheriche, and although further clinical testing is required, it should prove to be a major innovation for treating AMS in the Everest region.

To continue its work, however, additional funding is urgently needed. The American Alpine Club is now accepting tax-deductible donations on behalf of the Himalayan Rescue Association. For further information, contact the American Alpine Club.

PETER HACKETT, M.D.

*Lhotse, Winter Attempt.* A Swiss expedition to Lhotse established Base Camp on November 16 at 17,400 feet at the foot of Island Peak. The expedition, led by Joseph Fauchère, had eight members and was attempting the southeast face. They abandoned the attempt after reaching 20,675 feet on November 24. High winds were the cause of giving up. They also carried out cardiographic research.

MICHAEL CHENEY, *Himalayan Club*

*Nuptse, North Face Attempt.* We aimed to climb the north face of Nuptse (25,850 feet) from the Western Cwm without Sherpa support and without the use of fixed ropes. A few weeks before departure, a team experienced in light-weight expeditioning emerged, consisting of Michael Covington, USA, and Joe Tasker and me, England. On September 3, with 22 porters, we began the 180-mile approach march from the road-head at Lamasangu to the Everest Base Camp. Tasker and I reached Base Camp on September 23 to find the German-French Everest expedition well established. Covington unfortunately succumbed to hypothermia and mild pneumonia and had to stay at Pheriche to recover. He arrived at Base Camp on September 26, his pneumonia over but with a severe pain over his liver area which was to trouble him for most of the expedition. On September 28 Tasker and I established Camp II in the Western Cwm, a mile from the German-French Camp II and opposite the north buttress of Nuptse. Thus far we had been following the Everest expedition route and were enormously helped by their progress. The north face of Nuptse was plastered in fresh snow. More fell on October 1 and started again on the 4th continuing for three days, during which eight feet of snow fell on Camp I where all three of us were camped. On October 9, we three arrived at Camp II with enough food and equipment to spend seven days on the face. On October 10 Tasker and I set out on the lower part of the face. At first there were grounds for optimism as we found hard