

## Disease as a Way of Life

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IN all the recent talk about the "crisis" in medical care, a major concern—whether explicitly stated or merely implied—has been the disproportionate burden of disease borne by America's poor. The way in which to lift that burden, it has been generally assumed, is to provide more health services: better financing, more doctors, a greater application of technology. There can be no doubt that these services are necessary, nor that some form of national health insurance over and above the present system of Medicare is a matter of the utmost urgency. Yet in pressing for these goals we would do well to take a hard look at some of the assumptions behind the demand for better health services, lest in mistaking the true nature of the problem we lead ourselves to the wrong solution.

As Warren Winkelstein, Jr. has recently noted, there may in fact be good reason to dispute "the underlying belief among both the lay public and people in the technical professions that the quantity and quality of medical services are directly related to the health status of the population."<sup>\*</sup> As Winkelstein goes on to state, there is little evidence to support the assumption that the health of a population is primarily a function of its medical services, and much to contradict it.

To illustrate this contention, let us consider briefly the case of the

Navajo Indians, a poor and disease-ridden people that (beginning in 1955) was the object of study of the Navajo-Cornell Field Health Research Project. Working in close cooperation with the tribal leaders, the study group brought modern medical services to a part of the Navajo Indian reservation, providing a well-equipped ambulatory care facility, transportation, physicians and nurses, trained indigenous health aides, and access to hospital care. All of this was introduced into an extremely poor, non-literate environment, among people living in extended families in windowless one-room log-and-mud dwellings with dirt floors.

Both the Navajos and the study group were pleased with the day-to-day achievements of the technology and the delivery system that had been introduced into the reservation. Medical care—in the classical form of clinical physicians (a complete innovation for the Navajos when it was introduced)—was well received and utilized. "The system was set up with full community participation, and there was a mechanism for effective, continued community control."<sup>†</sup> And by objective criteria as well, quite apart from the issue of patient-satisfaction, the project had successes to report over the course of its five years of operation. Tuberculosis, a common problem among the Navajos, was sharply reduced, and, by the end of the study, so was the amount of significant ear infection among children.

But the really startling findings were on the negative side. Aside from the reduction in tuberculosis and ear infections, at the end of five years the investigators discerned no evidence of any real

change in the pattern or prevalence of disease. There was a possible slight diminution in the overall death rates, despite an infant mortality rate that persisted at three times the national average, but no reduction at all in the incidence of the diarrhea-pneumonia complex which remained the single greatest cause of illness and death among Navajo infants.

As the term "diarrhea-pneumonia complex" suggests, infants in the Navajo environment commonly suffered or died from a combination of respiratory and intestinal complaints that are not caused by any single bacterium or virus. Major contributing factors are malnutrition and poor sanitation. Nor, in general, are antibiotics helpful: the "normal" bacteria and viruses appear to get the upper hand and keep it. The disease, in other words, is in some sense a function of the way in which the Navajos lived and raised their infants. Thus, in general terms, the entire disease pattern of the tribe—unresponsive as much of it was to modern technology—could not be changed until basic changes took place in the tribe's way of life. In a social setting conducive to a particular pattern of disease, medical care alone—no matter how modern, well delivered, or technically complete—cannot be expected to lift the burden of sickness.

Our own past as a nation is further illustrative of this point. Everyone is aware of the profound changes that have occurred over the past two generations in the patterns of disease in America. Moreover, since the disappearance of the common infectious scourges of the past has been more or less

<sup>\*</sup> "Epidemiological Considerations Underlying the Allocation of Health and Disease Care Resources," *International Journal of Epidemiology*, Vol. 1, pp. 60-74, (1972).

<sup>†</sup> W. McDermott, K. Deuschle, and C. Barnett, "Health Care Experiment at Many Farms," *Science* 175, pp. 28-31 (1972).

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