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A View of Health Research and Care

Science has devoted special issues to energy, food, materials, and electronics. These topics were spotlighted because they are of major long-range significance. Health care is a topic of comparable importance.

Health is ever present in the consciousness of most people. Because they have seen miraculous results in some instances, people have come to have unreasonable expectations about the cure of all ills. As a result, annual expenditures for health care rose to \$160 billion in 1977. At the same time, public concern about medicine has frequently been aroused by news stories concerning ethical problems, access to medical care, excessive surgery, and malpractice.

In choosing material for this issue we have not attempted to be encyclopedic. In part this is because some matters have recently been treated on these pages. For example, we have printed series on both cardiovascular and cancer research. Material for this issue was necessarily limited to 23 articles. These were selected from a much larger list. Efforts in identifying, selecting, and recruiting articles led to views about progress and priorities in medical research and health care. Over the past decades, research has resulted in antibiotics, vaccines, therapeutic drugs and devices, new diagnostic tools, and other aids. These have made possible great improvements in the practice of medicine.

But as one now surveys the scene, it appears that both research and care are focused too strongly on cardiovascular diseases and cancer and on using medicine and technology to prolong burdensome and meaningless existences. Each of us is programmed eventually to die. The day can be brought closer by accident or self-abuse, but sometimes it can be postponed only at great emotional and financial cost.

Obviously, we must continue to seek improvements in the prognosis for cardiovascular disease and cancer. But many believe that preventive measures are more useful than therapy in minimizing the impact of these disorders. Unfortunately, we do not have enough evidence of the effectiveness of such measures as exercise, appropriate diet, and adequate sleep. Even were such data at hand, many people would disregard them. However, perhaps as many as half of the population would be encouraged in measures designed to ensure better health.

One of the greatest accomplishments of medical research is in the area of mental problems. How the mind works is still a great puzzle. Treatment for mental patients leaves much to be desired. However, some of the progress that has been made can be gathered from Philip Berger's article in this issue. Describing the situation as it existed in mental hospitals before the advent of pharmacotherapies in the 1950's, he writes, "Hallucinating patients paced the floor, or rocked in chairs, and talked to their 'voices'; paranoid patients scanned the rooms, ever vigilant and ever fearful. Catatonic patients remained in fixed positions for days at a time, developing swollen limbs and pressure sores; withdrawn patients sat on wooden benches, year after year, doing nothing, while their physical health deteriorated."

Following the introduction of new drugs, the number of patients in mental hospitals fell from a peak of 559,000 in 1955 to the present level of 200,000. During this interval, public attitudes toward mental disorders changed from cold aversion to more sympathetic understanding that a treatable disease was involved. Mental disorders affect people of all ages. Thus, improvements in the care of mental patients can convert many young people from lifelong burdens on society to useful citizens. It has been estimated that the current economic cost of mental and emotional problems is upward of \$50 billion annually. Thus, much remains to be done. Prospects for improvements are excellent. Behavioral neurochemistry is in the midst of great advances aided by powerful new experimental tools and procedures. The article by Barchas *et al.* in this issue provides a solid basis for expectation that the coming years will bring rich new understanding of mental processes and further improvements in treatment.—PHILIP H. ABELSON