

**W**HEN HE WAS TOLD that one of his former residents at Children's Hospital of Philadelphia had described him as "half Lone Ranger, half God," the surgeon in chief, laughing aloud, exclaimed: "That's a hard role to fill." But if there exists an American surgeon who might do it with aplomb, he is Charles Everett Koop.

Physician, educator and missionary, Dr. Koop has personally brought word of improved health care for children to remote medical outposts around the globe while simultaneously inspiring a generation of young American surgeons to carry on the pioneering work of the late Dr. William E. Ladd, of Boston Children's Hospital.

Although he is an undisputed master of pediatric surgery and has trained some of the country's leading experts in the field, Dr.

Koop himself has never received formal training in the subspecialty for which he has gained world renown. As a Cornell medical student, he had enjoyed working in cancer research under Dr. Hayes Martin and the late Dr. Cornelius P. Rhoads, and as a surgical resident at the Hospital of the University of Pennsylvania he had looked forward to joining the hospital's tumor clinic.

Two factors intervened, however, setting the course that brought Dr. Koop to his present position and lifelong vocation in medicine. The first was a personal trait—an iron tenacity that has carried him through many seemingly hopeless situations. The second was a personage—Dr. I. S. Ravdin, his chief of surgery. Both factors were linked on December 8, 1941, when intern Koop, hospitalized with a peptic ulcer, learned quite by

accident that Dr. Ravdin was leaving for Pearl Harbor the following day "to try out the new sulfa drugs."

Fearing this might cause a delay in his residency plans, he left his hospital bed to seek out the busy chief of surgery. When three attempts failed to secure him an appointment, he parked himself on the running board of Dr. Ravdin's car. During the ensuing drive to the airport, he learned that he was to be named Harrison Fellow in Surgery and Surgical Research at the University of Pennsylvania. It was on Dr. Ravdin's urging, when the latter returned from the war in 1945, that he decided to join the Children's Hospital of Philadelphia rather than pursue an interest in a tumor clinic.

Within three years, while still only an associate in surgery, Dr. Koop became surgeon in

chief at the Children's Hospital. "Actually, I knew very little about pediatric surgery then," he recalls. "But I did know I wanted a department as good as the one at Children's Hospital in Boston." The best way to accomplish this, he decided, with typical forthrightness, "was to study their operations firsthand. That's why I went there in 1946 for seven months as a fellow." Looking back now on his Boston days, when the literature on pediatric surgery was sparse (there was only one textbook), he feels that what he acquired was not technique but rather a philosophy for "the over-all surgical management of infants."

Dr. Koop attributes his tenacity to his Dutch forebears, who settled in 1690 in Flatbush, Brooklyn, where his mother still lives. Drawn to New England by the summers he had spent camping in the White Mountains, the young, sports-minded Koop chose Dartmouth as his college, entering that school in 1933 at the age of 16. A fractured cervical vertebra put an end to his skiing, and a brain hemorrhage—incurred during a football contest—terminated his athletic activities. These setbacks were more than compensated for, however, in 1936, when a classmate invited as guest for the winter carnival a Vassar student named Elizabeth Flanagan. She and Chick Koop were married in 1938 while he was a first-year medical student at Cornell Medical College.

In the years since he became head of his department at the Children's Hospital in Philadelphia, Dr. Koop's missionary work on behalf of improved pediatric surgery has become the focus of all his attention and the achievement of which he is proudest. Although he is generally a mild-mannered man, he can be outraged

when confronted with a cancer fatality that common sense might have averted, or with an infant, usually flown in from a distant city, in whom a neonatal emergency has been bungled. "It has taken too long for the basic concepts of first-class pediatric care to filter down to the child," he complains. "If surgery has to be performed," he declares, "the first 48 hours are best. Despite all the information available, gross errors are still made. Nobody knows how many. We see only the survivors."

His frankness on the subject nearest his heart has, on occasion, ruffled some feathers in the medical community. Actually "he's grown much calmer in the last five years," according to Dr. John W. Hope, the hospital's radiology chief, who has been Dr. Koop's friend and colleague for 17 years. "When he first came here, he was the only pediatric surgeon in the Delaware Valley, a region of 10,000,000 people. In those days, his habit of speaking *ex cathedra* on the subject of proper infant care antagonized a lot of people. But the truth is, he's been very successful in achieving what he set out to do. Instances of bungled neonatal surgical care are getting rarer now and Chick gets a more gratifying response from the medical community."

To his colleagues, the man who was determined to put pediatric surgery and the Children's Hospital on the map is a thoroughly approachable chief, never too busy to give

clarifying counsel on a personal or medical problem. "When we were young, the virtuoso surgeon ruled his department like a king," says Dr. Hope. "Koop is a new breed of cat. Cool, unhurried, totally efficient, he has eliminated all waste motions from the operating theater, moving from procedure to procedure with deceptive ease."

Widely celebrated for his diagnostic acumen, Dr. Koop relies heavily on observation in the Osler tradition, frequently urging his residents to "watch the way the patient walks, talks, sits, runs and behaves." One colleague cites the arrival of a young patient whose referral and x-rays had suggested Hirschsprung's disease. After the boy—whose fecal impaction was a source of parental alarm—had entered the office, been examined and left, Dr. Koop said flatly: "No child with Hirschsprung's disease ever bounced into a room like that."

Well-known to oncologists around the country are his urgent and repeated admonitions for alertness to childhood cancer. Through the *Journal of Pediatric Surgery*, a new periodical of which he is editor, he hopes to bring this warning to an even wider audience of pediatricians and surgeons. Nothing saddens him more than to hear a parent say: "But the doctor told me it was just a lump that would go away." "Cancer is a pediatric challenge," he declares, "that will not be met adequately

until the possibility of cancer in childhood becomes a part of the thinking of every physician." He believes that "all solid and cystic tumors in childhood must be considered malignant until proven otherwise."

The surgical skills for which Dr. Koop is famous were put into high gear in 1957 when pygopagous twins were admitted to Children's Hospital. "They looked like a grotesque Siva," he recalls, describing the conjoined seven-day-old infants, with their single vulva and anus but two pairs of legs. "They scared the life out of me. The night before the operation I dreamed I made a wrong incision that left me with two babies, each with a leg of the other." Owing in part to the reduction of "emotional tensions and hazards" among the six-man team by a series of preoperative "skull-sessions," the operation was a success.

In the O.R., where he lards his teaching with funny anecdotes and bits of surgical gossip, he admonishes his residents to be gentle at all times with their young patients. "You can't treat infant tissue with the same vigor you use on adults," he says. With young men interested in pediatric surgery as a career, Dr. Koop does all that he can to ascertain that their interest is in improved child care and not merely surgical opportunism.

At the age of 30, Dr. Koop, who had considered himself to be until then an "unknowing churchgoer," had a spiritual exper-

ience that has profoundly affected his life. He later became associated with the Presbyterian church of which he is now an elder. The manner in which, during the past 23 years, he has devoted himself to the demonstration in words and deeds of his evangelical beliefs may, some friends declare, contain the clue to his complex personality. He conducts Bible classes and is in much demand as a lay preacher. But listeners who expect an emotional sermon from him are surprised to hear a relaxed Biblical scholar build a logical presentation of the Christian gospel.

"I don't consider myself a religious man," he says, though some friends attribute his insistence on excellence in work to his Calvinistic tenets. "I would make a strong plea," he once told a meeting of physicians in England, "that young doctors pursue excellence, seek advancement, achieve competence and avoid any taint of mediocrity. Success in the professional world seems to authenticate the individual's Christian message."

He obeys his own dictum that all physicians have "an obligation to teach." Consequently, whether under Christian or medical auspices he manages to combine both the religious and educational aspects of his philosophy. In 1961 he spent six weeks in Africa, visiting hundreds of missionary physicians and medical workers and collecting information for the Medical Assistance Program, an agency that sends drugs and medical supplies to 75 coun-

tries. In 1965 he went around the world speaking at the request of many of the foreign-born residents he had trained on condition that they return to practice in their native lands.

In many ways Dr. Koop is an anachronism. Displaying the Schweitzer-like calm of a 19th century missionary, he will work imperturbably among the Tarascan Indians of Mexico or treat tribal chieftains in Africa, yet admits that helping the derelicts of Philadelphia's skid row has brought him "as close to despair as I have ever got—except when I was delivering babies in Harlem."

On the subject of social medicine, Dr. Koop believes that certain types of surgical illness in newborns present a financial burden that no one family can cope with. But he is sure that it is possible to have government planning for this type of health care without loss of the physician's freedom.

Entirely without bitterness, he describes the irony of his position last April when his youngest son, David, died in a rock avalanche while mountain climbing. "Shortly before that, because of something I had written, I had become an 'expert' on what to tell the parents of a dying child," he says. But a colleague who attended a memorial service for David recalls that "Dr. and Mrs. Koop were upstairs, comforting all of us who had come to comfort them. This deep calm permeates every aspect of the surgeon's life, personal, social and professional."