This story could save your life

He Declared War on Heart Attacks

BY CAROL KRUOFF

The pain struck suddenly in his chest as George Fickus filled a vending machine with sodas. A gleam of perspiration broke out over Fickus's body—but then, all at once, the pain was gone.

I'll go home and rest, thought the 57-year-old Baltimore man. Shaken, he walked slowly back to his van to tell his assistant he was taking the rest of the day off. But Blaine Pierce took one look at his boss and said, "No way—I'm taking you to the hospital."

Pierce, 27, recognized the pained look and pale, sweaty sheen on Fickus's face because several years earlier his father had died of a heart attack. "My dad was perspiring like that and had chest pain, but he wouldn't go to the hospital," Pierce told Fickus. "Before we knew it, he was dead. I'm not going to let that happen again."

Fortunately they were near Baltimore's St. Agnes HealthCare. This community hospital has the world's oldest chest pain center—a special emergency service for patients with suspected heart attacks. Within minutes of his arrival, Fickus was hooked up to a heart monitor, an intravenous
line and an oxygen tank. A pulse oximeter (a small clip that looks like a clothespin) was placed on his middle finger to measure the oxygen reserve in his blood.

Dr. Raymond Bahr strode briskly through the door. The gentle, white-haired physician peered at the heart monitor and studied the patient's electrocardiogram. He saw that Fickus was experiencing the "stuttering presentation" of intermittent chest pain, likely to mean a heart attack in progress. Bahr instructed a nurse to administer tissue plasminogen activator, a drug that dissolves clots and prevents damage from occurring. "You're lucky," he told Fickus, laying a reassuring hand on the patient's arm. "You arrived within the first 'golden' hour when our therapies are most effective. You should be fine."

Farfetched Dream. Working in an ordinary community hospital, not a major academic center, Raymond Bahr is an unlikely hero in the war on heart attacks. Yet his creation and promotion of chest pain centers in hospitals nationwide are dramatically changing the treatment of people with suspected heart attacks. In addition, Bahr has pioneered a program that enables people to recognize and take action when faced with the early warning signs of America's No. 1 killer. According to Bahr, half of the nation's 500,000 heart-attack deaths each year could be prevented if people sought help right away.

Born in 1935, Bahr grew up in Canton, Md., a working-class section on Baltimore's East Side. Life became tough when Ray's father, a factory worker, died suddenly. Ray was only six. His mother, pregnant with her fourth child at the time, supported her family by scrubbing floors and cleaning houses.

As a teen-ager, Ray got a job after school at Kaminski's drugstore to help pay for his parochial-school education. Ray always assumed he would work at the area's brewery, steel mill or tin-can plant. With owner Felix Kaminski's encouragement, however, the youngster set a higher goal for himself: he attended pharmacy school while working at the store nights and weekends. After graduating first in his class of 52 students, he stayed on at Kaminski's.

One day Bahr was busy behind the counter when Jake, the neighborhood tailor, came bustling into the pharmacy. There was something about Jake's skin—its paleness and sweaty gleam—that spurred Bahr to ask if something was wrong. "I'm not feeling quite right," Jake admitted. "I think I have indigestion. It woke me early this morning, then went away. Now it's back."

"You should see a doctor," Bahr told him. Then Bahr became distracted with other customers, and Jake left. Hours later the tailor was found dead of a massive heart attack.

Bahr then realized that Jake must have been in the early stages of a heart attack and should have gotten immediate medical help. He didn't have to die. Feeling awful, the 22-
year-old pharmacist wished he could spare others the same fate.

One night Kaminski brought up an idea that ignited his protege's thinking. "You know, you don't have to stop at being a pharmacist," Kaminski said. "You can go to medical school and work here on nights and weekends to pay for it."

Medical school—now that's a farfetched dream, Bahr thought. Yet the idea appealed to him. Fueled by a sense of responsibility for Jake's untimely death, Bahr enrolled in the University of Maryland School of Medicine. He soon discovered he had a natural affinity for internal medicine and a special desire to help patients through life-or-death struggles.

**Shifting Focus.** Bahr served his last year of residency in the intensive-care unit at St. Agnes, across town from where he'd been raised. At the time, a new type of facility was being pioneered, the coronary intensive-care unit, which closely monitored people who'd had heart attacks and were at risk of sudden death. So when administrators asked Bahr to develop such a system for them, he jumped at the chance.

Over the next several years, however, despite the state-of-the-art unit Bahr had set up, he still saw countless premature, unnecessary deaths. Generally, one-third of heart attacks proved fatal; half these people died before reaching the hospital. Those who survived often suffered irreparable damage to the heart. Relatives would tell the doctor that their loved ones had felt chest "pressure" or "tightness" for several hours, but passed off the discomfort as heartburn or muscle strain. Too stoic or embarrassed to seek help, they waited until their symptoms became unbearable before getting medical care. By then, it was often too late—they'd had a heart attack.

"If only they'd come in when they first experienced symptoms," Bahr said. He felt discouraged each time he lost a patient. On one such frustrating occasion he thought of Jake, who had ignored the chest discomfort preceding his heart attack. If I knew then what I now know, I could have saved him, he thought. At that moment he was struck by a simple truth: Jake's symptoms were like a smoke alarm sounding at the start of a fire. Heart attacks have beginnings! Why are we focusing all our energy on the time during and after the heart attack? he wondered. We should be shifting our focus earlier.

Bahr launched his first public-education campaign to alert people to the little-known symptoms of an impending heart attack. Nurses spread the word at schools, churches and community organizations. Unfortunately, the medical establishment was skeptical. "We don't want to create heart-attack hysteria" was a familiar response. Many health professionals worried that telling the public about early warning signs would flood emergency rooms with people suffering from indigestion.

Undaunted, Bahr continued piec-
ing together feedback from patients and their families that would help persuade his colleagues. One common reason people frequently dismissed all but the most severe pain was a misperception that they should “tough it out.” Typically, patients told Bahr, “I really didn’t think my nausea and sweating were an emergency.”

Part of the problem, too, came from the hospitals. Busy emergency-room personnel weren’t always responsive to people who didn’t have the classic elephant-standing-on-the-chest pain. Then one day Bahr had an idea: what if we started a facility with a less threatening name, such as “chest pain center”? It could be staffed by nurses and doctors trained to help people with all kinds of chest discomfort.

“Red-Carpet Treatment.” Bahr proposed his plan to the St. Agnes Board of Trustees in 1977, but the administrators turned him down. Their refusal merely propelled him to intensify his efforts, however. Twice in the next two years Bahr presented his proposal to the trustees, each time offering more data and doing a more persuasive presentation. And each time the administrators turned him down.

Then, in 1980, when the hospital was finishing an addition, Bahr again proposed that a chest pain center be included in the new area. The administrators finally gave him the go-ahead. Soon the journal Medical
World News was trumpeting Bahr’s innovation, noting that the pioneering physician wants “red-carpet treatment” for patients who may be having heart attacks.

Improving hospital care solved only part of the problem, however. People still needed to learn about a heart attack’s “soft symptoms” so they could get to the chest pain center early enough to be helped. At that time cardiopulmonary resuscitation was getting great attention, and Bahr and his staff taught it to people in the community. He soon added a program to educate the public about heart-attack warning signals, calling it EHAC, for Early Heart Attack Care. “EHAC is the message,” Bahr would say, “and the chest pain center is the delivery system.”

A breakthrough came in 1987 when Bahr received a grant from the National Emergency Medical Association, which thought EHAC had potential. Bahr spoke of his two-pronged approach to combat heart attacks at annual conferences of emergency-room physicians, cardiologists, critical-care nurses, paramedics and any group willing to hear him.

Slowly, but then with gathering momentum, the concepts began catching on. And despite skeptics’ fears, “cardiac chaos” did not occur. Instead, an estimated three million

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**WARNING SIGNS OF A HEART ATTACK**

- Pressure, aching or burning—not necessarily pain—in the chest. Often it increases with activity and subsides with rest.
- Discomfort, tightness, squeezing or fullness in the chest, usually lasting longer than two minutes. Mild discomfort that may come back sooner, last longer or feel more severe each time.
- Discomfort in the teeth, jaw, inner arm (often the left) or back.
- Dizziness, fainting, sweating, nausea, shortness of breath or weakness.

If you’re not sure whether discomfort is from heartburn or a heart attack, ask these questions: Is the discomfort located in the center of the chest? Does it recur? Does it increase in intensity? Does it become more intense with exertion, then go away with rest?

If the answer to any of these questions is yes, take an aspirin, call 911 for an ambulance, or have someone drive you to a chest pain center or emergency room. Don’t drive yourself.
people a year are evaluated quickly and effectively in the 700 chest pain centers currently operating around the country. Bahr predicts that virtually all of the nation’s 4400 emergency rooms will be equipped with chest pain centers by the year 2000. The EHAC program is now taught in 1000 hospitals, and half a million people have learned about EHAC through Bahr’s public-service tape, available free at some video stores, baseball stadiums, high schools, colleges and libraries.

**EHAC Oath.** Still, it was only last year that the remaining resistance in the medical community began to crumble. Despite Bahr, many health professionals thought early heart-attack symptoms were rare. Then in January 1996, renowned Boston cardiologist Eugene Braunwald reported in the *New England Journal of Medicine* that about half of all heart attacks have such early warning signals. Other doctors also began to agree with Bahr’s message.

“Early on, Ray Bahr recognized the important truth that time saves heart muscle,” says Dr. Henry McIntosh, medical director of the Preventive and Rehabilitation Center at St. Joseph’s Hospital in Tampa, Fla. “If we can treat a patient within 60 to 90 minutes, we can salvage heart muscle and prevent damage. That’s a message my generation wasn’t taught.”

Last February Bahr was honored by the American Heart Association-Maryland Affiliate. When the crowd rose to give him a standing ovation, Bahr surprised everyone by asking them to remain standing and be deputized as Early Heart Attack Care Givers. Audience members raised their right hands and repeated the EHAC oath: “I hereby solemnly swear that when a person in my presence is experiencing the early symptoms of a heart attack, I will make every effort to get that person to go to the nearest hospital emergency room to get those symptoms checked out.”

“I’ve been waiting 30 years to do this,” Bahr told the crowd with glee. And from this heart doctor’s record, it’s clear he won’t stop deputizing people until he has completely disarmed America’s No. 1 killer.

To find out if a hospital in your area has a chest pain center, or for a free video, audiotape and booklet on EHAC, send a self-addressed, stamped envelope to Dr. Raymond Bahr, St. Agnes HealthCare, 900 Caton Ave., Box RD, Baltimore, Md. 21229-5299. Or use these electronic addresses: e-mail: info@ehac.org; on the Web: http://www.ehac.org.