As early as 1931, Henry Kendall of Baltimore’s Children’s Hospital School recognized that immobilization of polio survivors with splints and casts was preventing muscle contractions and joint deformities but was not allowing muscles that still had functioning motor neurons to move again. With his wife, physical therapist Florence Kendall, the Kendalls recommended that initial splinting be followed by gentle massage of muscle spasms, stretching and careful muscle training.

But in 1940 a self-taught “nurse,” Australian Elizabeth Kenny, came to America with a “new concept” for the cause and treatment of polio that she said was “diametrically opposed to those accepted throughout the medical world.” Thus Kenny was welcomed to America wielding misinformation about polio the disease and unnecessary boiling, blistering hot packs.

Elizabeth Kendall McCreary, the Kendall’s daughter, recounts the battle between the Kendall’s scientific studies and clinical expertise versus the media’s extolling Kenny’s “alternative facts” about polio.

Dr. Richard L. Bruno, Editor

I want to share with you some stories of pivotal moments in Florence Kendall’s professional career. You may know her as “The Physical Therapist
of the Century,” the #3 orthopedic physical therapist in the world (#1 in America, #1 woman), the recipient of numerous honorary doctorates and of all the top awards in her profession.

But all the accolades, fame, celebrity, celebrations and applause that are associated with Florence Kendall weren’t always there for Florence or for her husband, Henry.

People often ask what made Florence so strong? Part of her strength was gained by climbing mountains of adversity – especially during the decade of the 1940’s. And that’s where I’m going to take you.

A War Within a War

The ‘40s was a decade of discouragement, disappointment and even despair for the Kendalls, but it was also the decade of their greatest challenges and growth, and that’s why it’s important for you to know about it.

This decade (and even longer) was when the Kendalls were probably two of the most politically incorrect people in America. They went against a tidal wave of public opinion that included the press, the A.M.A., their own PT associates, prestigious journals, Congress, the FBI, the White House, Hollywood and, most of all, the Diva of the Decade – the second most-admired woman in America – “Sister” Kenny. It was an extraordinary time.

What I want to do is share those stories that will not only give you greater insight into and appreciation of Florence, but also stories that may empower you – and give you strength to persevere against all of the challenges you may face. Hopefully, your own problems will pale and seem much more surmountable when put into the perspective of what Florence and her husband, Henry (a.k.a. Bob), went through to reach the pinnacle of their profession. That summit was not easily reached.

First, a little background, the setting and cast of characters of about 70 years ago:

- A president who had had polio and was confined to a wheelchair and who had established what was to be the pre-eminent polio treatment center in the US in Warm Springs, Georgia.
• A partially blind physical therapist in Baltimore, Henry O. Kendall, who, in over 15 years at the Children’s Hospital, had established an excellent reputation for his care and diagnosis through muscle testing of polio patients, who was called a “master clinician” and who, in 1935, married Florence. Together, they wrote a *U.S. Public Health Bulletin* (#242) published in early 1938 on the after-care of polio. It was well received. Florence says that was her first taste of the politics of polio (another good story that won’t be told here).

• A “nurse” from Australia – who had never even graduated from a nursing school – Sister Elizabeth Kenny came to the US in 1940 saying she had a “revolutionary treatment for polio” that she said was completely opposed to the so-called orthodox treatment, her treatment resulting in an 80% recovery rate compared to 13% for the orthodox methods. In the Kenny “system,” muscle testing, braces, splints, casts and even massage were not used (“Massage is altogether forbidden,” said Kenny in February 1942) and especially there was to be no muscle testing. Kenny also said that polio was a disease of the skin, in spite of a decade of overwhelming neuropathological and neurophysiological evidence that polio was a viral disease of the neurons that made muscles move.

• A public, desperate to find answers, desperate for hope when it came to the scourge of polio that devastated lives and families. No one knew what caused polio or how it was spread. At times of epidemics whole communities were known to put up signs saying “Children Under 16 Not Allowed To Enter This Town.” Quarantine signs were put on homes. Affected persons were immediately isolated in hospitals often against the will of parents or family. It was a time of individual rights versus public health mandates. This was also a public dealing with World War II and all the fears, separations, deaths and injuries of war, a public desperate for someone bearing good news and hope. Fear defined the mood of the early 1940’s. Hope is an antidote to fear and hope is what Sister Kenny brought. She could not have arrived in America at a more auspicious time for herself.

A Pivotal Day, A Pivotal Hour

I would like to take you back over 70 years to what I believe to be the most pivotal day, perhaps the most pivotal hour, in the professional lives of the Kendalls.
It’s Tuesday January 21, 1941 at a Minneapolis hospital where the Kendalls had been invited, along with others, to observe Sister Kenny’s methods for three days.

It’s 9:00 AM on the morning of the third day and the Kendalls had been told that Sister Kenny wanted to meet with them. They arrived to find Sister Kenny alone with the *Public Health Bulletin* they had written. She wanted to discuss it.

It was evident over the previous two days that there were disagreements, and Sister Kenny did not take well to disagreement. In fact, Alice Lou Plastridge, a physical therapist from Warm Springs, described Sister Kenny during those three days:

“She had an antagonistic attitude towards everyone” and “She seemed to feel every question was a criticism rather than a sincere query.” “She sincerely believes that her method is not only the best, but the only effective one.” Plastridge also referred to her “stubbornness and belligerence.”

So Florence Kendall started out trying to be conciliatory and said to Sister Kenny (and I am quoting from Florence’s handwritten notes): “You know there are many things we could get together on by being open-minded and discussing some of the problems, and we’re ready to give you credit for a contribution in the form of heat for acute cases. There are not as many points of difference as it seems.”

But Sister Kenny was not receptive to conciliatory comments. Kenny misquoted Florence’s remarks, whereupon Florence said to Kenny, “We do not wish to sit here and be so completely misquoted unless we can be in the presence of the doctor in charge.” They placed a call for the doctor at 9:15 AM.

They waited. Things began to deteriorate further. The Kendalls said they had been promised they would see a treatment. Sister Kenny said, “Too bad.” Henry Kendall replied, “When you ask me questions, as you did yesterday, I have given you sensible answers. But when I ask you for scientific facts, you’ve answered by saying, ‘You’re talking about a disease that doesn’t exist, or further cover up by referring to mental alienation’.”
Kenny was angry that the Kendalls were going to write about her after only a few days, and she asked them how long they planned to stay in Minneapolis. Henry Kendal responded, “AS LONG AS IT TAKES TO EXPOSE YOU FOR THE FRAUD THAT YOU ARE!”

Henry O. Kendall had just called the woman who was to become the second most admired woman in the United States (after Eleanor Roosevelt) a fraud.

The Kendalls then told Sister Kenny they would wait in another office in the hospital until a doctor could come. While waiting they got a phone call, about 45 minutes later, saying Kenny had left the hospital, called for her associate to leave, and that she was going to return to Australia. And she left, 10 days later, but not before she wrote the following on January 28 to the Medical Director at Children’s Hospital about the Kendalls:

“It was impossible for me to demonstrate my work to these visitors, owing principally to the fact that they were absolutely non-receptive.” She also said “Mr. and Mrs. Kendall could not understand what I was talking about [&) I have definitively proved the symptomology of the disease to be exactly opposite to that accepted by Mr. and Mrs. Kendall. Therefore a treatment based on the wrong symptomology cannot be satisfactory.”

Although the Kendalls would have liked a cooperative search for the truth, this was not to be. The battle lines had been drawn.

Kenny’s departure generated a great deal of press, and the public was led to believe that a recalcitrant orthodox medical establishment was blocking her innovative approach to the dreaded disease. When she returned a few months later, the press, public, politicians and even the medical community received her as a heroine returning to wage and win a war.

**Two Pivotal Years**

That pivotal day was followed by two pivotal years, 1941 and 1942, when the Kendalls were clearly on the losing side of the political and propaganda war against polio. Sister Kenny used the press and public opinion to try to coerce the medical profession into adopting her methods. And, for a time she succeeded.
In probably one of her lowest moments, Florence wrote the following:

“An animal in the heart of a stampede commits suicide if he stops running with the herd. Sometimes propaganda has the power of a stampede, and to resist the force is suicidal, too. Be that as it may – if the herd is being led to slaughter, one does not risk too much in risking suicide.”

The Kendalls knew that by not going along with the herd, by not being politically correct, they were risking professional suicide.

Some of the lowlights of 1941 included Kenny’s return after several months. Her return was welcomed by the National Foundation for Infantile Paralysis that, in June 1941, jumped on the Kenny bandwagon and endorsed her methods (they jumped off the bandwagon a couple of years later). Toward the end of 1941, the A.M.A. also endorsed Sister Kenny’s methods.

In October 1941 a flawed study by two St. Louis physicians appeared in a prestigious orthopedic journal. It mistakenly portrayed prolonged immobilization (up to 18 months) and prolonged rest and protection as being the “Kendall Method.” It was not. The article concluded that the “Kendall Method” was not effective in the treatment of polio. Imagine how you would feel if your life’s work were totally misrepresented and dismissed as ineffective in a prestigious medical journal! And how would you feel about the veracity, validity and reliability of any “professional” journal articles?

About five months later in the Spring of 1942, the Kendalls learned something shocking about the published study from a Dr. Irwin from Warm Springs. Florence wrote:

“One evening he invited Mr. Kendall and I to join him in the cocktail lounge. He said he wanted to tell us how we had been ‘set up’ for the so-called study in St. Louis. It had all been planned…in order to discredit Mr. Kendall’s polio treatment.”

The damage had already been done. In January 1942, an article appeared in the Physiotherapy Review by a Dr. Hansson based on that flawed study. He wrote, “McCarrol and Crego, by their critical study of this long immobilization have destroyed the Kendall myth.” He also said that
hopefully this method “will be discontinued forever to the relief of patients and parents.”

Now those are discouraging words! Florence started calling her husband “Myth Kendall.” Still, they responded by writing an article called “Let’s Immobilize False Impressions.” But there were darker days ahead.

The Medical Director at Children’s Hospital was under intense pressure to adopt some of Sister Kenny’s methods, and he was about to capitulate. [The Kendalls did not see any need for the constant application of blistering hot packs when they had documented the ability to relieve spasm with gentle massage and stretching. Said Florence, "Seldom discussed were the adverse reactions to the hot packs. An adult who was treated at age 8 for polio says the heat treatments were the worst aspect of his illness, and to this day he cannot tolerate a hot bath. One boy was reported to have been hot-packed until his temperature reached 108 degrees F and he succumbed.” R.L.B.]

Florence wrote:

“"We were not about to be seduced into doing something we felt was wrong” and Mr. Kendall “threatened to resign rather than succumb to the dictates of (what he called) ‘Hearst Newspaper Therapy’.”

Unfortunately, freedom of the press can very easily and quickly become tyranny of the press – and that’s exactly what happened.

Even the Maryland chapter of the American Physical Therapy Association jumped on the Kenny bandwagon. The Kendalls had helped found the Maryland APTA and Florence served as its first President in 1939. So, imagine how they felt when, in 1944, the Board of Directors concluded that the Sister Kenny concept of polio treatment was the only logical, sensible manner to treat this dreaded disease. Then again, in 1946, the Maryland chapter announced unqualified endorsement of Sister Kenny’s theories, and members offered lifetime membership to Sister Kenny, which was promptly accepted.

The A.M.A. had tried to jump off the Kenny bandwagon in 1944 but, by 1945, Sister Kenny’s popularity had become so phenomenal that there was no stopping the tidal wave of public opinion. In fact, in early 1941,
congressional and FBI investigations of opposition to Sister Kenny were proposed and received front page newspaper coverage. Kenny said, “The only thing which will make me alter my plans for leaving will be an immediate congressional investigation of the situation.”

To be against Sister Kenny at that time was like being against the flag, apple pie and motherhood. It just wasn’t tolerated. Fortunately, when Roosevelt died in early Spring 1945, these proposed investigations also died.

I think it is worth noting that, while in 1945 America, congressional investigations of people opposed to Sister Kenny were planned, there was quite a different perspective on Kenny in England. The August 1945 British medical journal *The Lancet* stated:

“The ‘Kenny concept’ had been built up to a fictitious importance largely by salesmanship and wishful thinking.” “…it is the duty of honest physicians to oppose and expose false prophets irrespective of their sincerity. Fidelity to sound science is not a glamorous pursuit, not a financially lucrative one, but it does enhance ones self-respect, and, in the long run brings the respect of the world.”

Then, in 1946, Hollywood made a movie about Sister Kenny starring Rosalind Russell. It’s a real tearjerker. Once again, the British perspective was a good one. A report in the journal *British Association of Physical Medicine* describes the movie as “…an exaggerated sentimentality and also offensive sensationalism which should find no place in a film professing to
be of scientific value.” And, regarding the film’s attack on the Kendall’s “orthodox method,” it stated, “This portion deserves condemnation for sheer bad taste.” That was especially true because the little boy shown in the film with two leg braces representing the orthodox treatment of polio was not even a polio patient. He had spina bifida. That was a well-kept Hollywood secret.

Pivotal Exemption

Jumping ahead to the year 1950, you’d think by then that “The Diva Kenny” would no longer be front and center stage. But, in that year, the U.S. House of Representatives passed a resolution allowing Sister Kenny permanent access to the United States without visa or passport, allowing her to stay indefinitely. Congress exempted Kenny from all existing immigration and alien laws. This for the woman Henry Kendall had called a “fraud” nine years before.
So what did the Kendalls do in the late 40’s and early 50’s? They did not let common sense become a casualty of political correctness. They did the hard and tedious work of science, helping thousands of patients and, unlike Sister Kenny, keeping meticulous records for comparative studies.

In 1947 they did a flexibility study of almost 5,000 Baltimore school children to determine normal forward bending in different age groups because Sister Kenny was requiring all patients to touch their foreheads to the knees before they would be released from her care. This is not the kind of work that gets any press. But the Kendall’s study is now in every edition of their text *Muscles: Testing and Function*, the first edition published in 1948. [The Kendalls found that only about 1% of boys and 4% of girls 6 to 18 years old who had *not* had polio were able to touch their foreheads to their knees. R.L.B.]

**Polio’s Pivotal Year**

1952 was another very pivotal year in the professional life of the Kendalls. Not only was their second book, *Posture and Pain*, published and called twenty years ahead of its time, 1952 was the year of America’s worst polio epidemic (over 57,000 cases).

The Kendalls left Children’s Hospital and opened a private practice, a pretty wrenching experience that took a lot of courage. The Kendalls had used up all of their meager resources to write two books and, unlike Sister Kenny who had received massive amounts of money, they had received no funding for their treatment or research. And they had 3 young daughters to take care of.

At that time, the Kendalls weren’t even sure that doctors would refer patients to them privately. It took a great leap of faith and courage to start a private practice. Their own professional organization threatened to expel them. At one point the Kendalls actually tendered their resignation from the national physical therapy organization rather than be condemned by it.

But remember Dr. Hansson who wrote about dispelling the “Kendall Myth” in 1942? Well, in 1956, fourteen long years later, he reviewed *Posture and Pain* in an orthopedic journal and wrote the following:
“The authors’ integrity was well-established when they, almost alone among the country’s physical therapists, stood by their convictions and opposed Sister Kenny’s questionable idea of the pathology and the therapeutics of poliomyelitis. They have again shown the courage of their convictions by publishing a book on posture and pain in these days of antibiotics and steroids, which seem to dominate our therapeutics.”

And something else happened in 1952. Sister Kenny died in Australia. [The Australian and British medical communities had rejected Kenny in the late 1930’s for exactly the same notions about polio – “diametrically opposed to those accepted throughout the medical world” – that caused her to be welcomed in America. Despite the Congressional kudos of 1950, the American medical community and National Foundation for Infantile Paralysis feared that Kenny’s dogged pursuit of publicity and her angry public disagreements with the scientific findings that polio was in fact a disease of the central nervous system would cause Americans to reject the polio vaccine that in development. By 1951, it was time for Kenny to go. R.L.B.]

**Pivotal Courage**

It took an unbelievable amount of courage on the part of the Kendalls to stand up against the most powerful forces in the country, but that’s what made Florence strong. If she were here today she would be telling you not to get your exercise by jumping on and off the latest bandwagons, but by swimming against the tide of public opinion when necessary. And, don't be afraid to be politically incorrect!

Cervantes said, “He who loses wealth loses much; he who loses a friend loses more; but he that loses courage loses all.”

The Kendalls did not lose the courage of their convictions. That’s the message I’d like to leave you with. Despite so many stories of continued professional setbacks, the Kendalls left a legacy of courage, perseverance and a dogged determination to find and implement the facts. I hope their story will empower you in your own lives, and that you will persevere and try to make the changes and improvements that you know are needed in health care today.