

TENTH NATHALIE BARR LECTURE



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Looking Back, Looking Forward: Thoughts along the Journey

For 50 years, I thought that the initials N.B. stood for the Latin *nota bene*, meaning “note well.” Many of my professional books have small notations, N.B., in the critical passages. This year, the initials N.B. have taken on a new meaning: Nathalie Barr. This is the 18th Annual Meeting of the American Society of Hand Therapists (ASHT). I have attended all 18 of these meetings.

Numerology—the speech of numbers or the meaning of numbers—dates back to early times, the days of Pythagoras. Numbers are reduced to their smallest form. The number 18, composed of 1 + 8, reduces to 9. The number 9 is a finishing, or completion, number. It is a closing before new beginnings. My name or expression number also reduces to 9—that is, the number of teachers and lecturers. My life path number as a 9 indicates humanitarian and healing endeavors. So this 18th meeting has significance for me.

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Now, as I shift my energies from hand therapy to other pursuits, it is a good time to look back at my journey into hand therapy and to glance forward into the future. The ancients collected amulets or special objects to commemorate events in their lives. Some Native American women used a knotted ball of twine to mark unique moments in their lives. We use pictures or slides. This record becomes a tapestry of vignettes, events, and dedicated therapists along the way.

We make choices. Our destiny is in our own hands. Time moves forward. We have only the moment, and as human beings, we have a pretty short shelf life.

Success is a journey, not a destination. Nathalie Barr began her professional journey in the 1940s and was well established in the 1950s. She was already a role model for those of us following a similar path.

In the 1950s, the clinical affiliation lasted 9 to 11 months, which was equivalent to a fifth and costly year of college. The army, still recovering from World War II, offered me a paying program. I made a choice. I joined up. My professional journey began.

A shift of a few degrees at the beginning of any

voyage will mean a vastly different position far out to sea. Yes, the military had a long-term influence on my life. As a new college graduate, I thought I knew it all.

One of my first patients was a young soldier with causalgia. We were just beginning to understand the causes and effects, and there were no protocols. This was the early era of sensory stimulation. Jan Werner, one of my mentors, was doing some of the earliest research with two-point discrimination and monofilaments. While sensory testing with monofilaments was being refined, many of the military therapists used the nine-item Moberg pickup test for both sensory and functional evaluations. Most of the documentation on Jan's work has been lost, but these early programs laid a foundation for later research by therapists such as Judy Bell-Krotoski.

My introduction to splinting materials in the early 1950s involved the construction of a web spreader. Materials available at that time were plaster of paris, metals, wires, leather, and plexiglass. Plexiglass, our main material, came from airplane windshields. Plexiglass is not a thermoplastic material. Imagine having to make a positive mold of the hand! We used dental molding materials or plaster of paris, and then we used the positive mold to fashion the hot plexiglass splint. It was not warm—it was *hot*. You had to use gloves or you would burn your fingers. After finishing the web spreader, it was necessary to finish off all the rough, sharp edges. You could get a really nice clear, highly polished edge. However, if you or the patient dropped this plexiglass creation on any hard surface, it shattered. You started over. Splinting has come a long way, and today we have more than three dozen different materials.

Like all experiences, change can be an opportunity for growth. The profession was growing. I went back to the civilian world. After two years of working with the criminally insane and a large staff, I realized that I needed experience with hiring and firing. At this point, I took the opportunity to work on my master's degree at Western Michigan University. My goals at this time in my journey were to prepare myself for leadership roles and to "get my ticket punched" so that I could be competitive and support myself.

In the early 1960's, the United States was involved in the Vietnam conflict. The services were looking for therapists again. So, with all my new knowledge, I joined up again. The law of attraction states that what we give energy to comes to pass. I asked to be assigned to go anyplace but Texas—and true to the law of attraction, I went to Texas! Be careful what you ask for. My eventual assignment in Texas at the Surgical Research Unit at the United States Army Institute of Technology, Brooke Army Medical Center—better known as the Burn Unit—helped shape my future in hand therapy, for I was treating massive extensive thermal injuries to the hands.

We cannot direct the wind, but we can adjust the sails. The Burn Unit provided me with a chance for growth and creativity. There was wonderful cooperation between the occupational therapy and physical therapy departments—something we take for granted today in the ASHT.

A large percentage of the burns involved hand injuries. Splinting materials needed to be sterilized. Fiberglass was the only moldable material available that could be sterilized, so we had a small production of fiberglass splints. Each size and position—right or left—required a positive mold. I was trained in the making of positive molds from my experience in the 1950s with the plexiglass web spreader. The therapy office often smelled like a boatyard with all of the fiberglass resin, so engineers installed a major exhaust fan.

With severe hand injuries, sometimes the fingernails were the only place to attach anything to maintain special positions. Jazzed-up fiberglass resin provided a means of attachment. Instant glue as we know it today was not available; it was developed in the 1960s.

Because it wasn't easy to fashion hooks out of bandage clips, which were used at first, I substituted the sewing hooks. The smaller surface area of the sewing hook didn't seem to matter, because the fiberglass resin was so powerful. (Once, I demonstrated this technique at a lecture at Texas Women's University. After the lecture, I forgot to remove the hook. Several years later, the therapist saw me and told me that she had had to visit her doctor to have the hook removed.) It was possible to attach hook-and-loop fastener to the nails with resin, but in those days, self-adhesive hook-and-loop fastener was not available.

In our early days at the Surgical Research Unit, we had our own computers; we used punchcards. You punched holes in the card, and then you used the knitting-needle approach. Coded cards either fell out or didn't fall out. This was a very basic method to keep statistics and to provide material for the research we were doing. Look how computers can help us today. Imagine what they can do in the future.

At this time, someone suggested that continuous passive motion (CPM) would be helpful in regaining full hand motion. We had seen some nasty contractures with severe burns before the treatment included aggressive therapy and splinting. In the early 1960s, therapy was not as well accepted as it is today. The first CPM device I fabricated worked on waterpower. The nail hooks helped to hold the hand in place on the two-part hinged splint, and we concentrated on metacarpophalangeal joint motion. The waterpowered CPM device was not successful. With all the pressure, the rubber tubing kept popping off, and it was a wet experience. The facility engineer stepped in, and we designed a motor-driven unit. It worked but was cumbersome. The difficulties in setting up this primitive CPM de-

vice, combined with the crunch of war injuries and my philosophic base that active motion was more important than this semifunctional machinery, put this project on the shelf. Look where CPM is today.

In the mid 1960s, Orthoplast came on the market. Did you know that the product was originally clear? All sorts of creative opportunities presented themselves for splint fabrication.

Wherever you go, there you are. My assignments changed several times in the 1970s. Luckily, I was at Fitzsimons Army Hospital in Denver when the ASHT had its beginnings. Most of my time was spent in administration, working on staff development, but I was able to continue an orthopedic patient load and to explore new splinting materials and techniques. My mentor, Dr. William Eversmann, orthopedic surgeon, encouraged my participation in the ASHT. It was really a wonderful idea. So I was at the right time and in a good place when the hand therapy society began.

Hand therapy would become a priority in my life, although I did not realize it at the time. Over the next few years, I connected with others who became important to the ASHT and to me. We all grew because of our involvement in the Society.

Friends are flowers in the garden of life. Here come some of the "flowers" in my life. Each of these people has been supportive and helpful and has added color and beauty to my garden. Founding members from 18 years ago include Bonnie Olivett, Gloria Hershman, Gloria DeVore, Karen Priest-Barrett, Susan Glazer-Butler, Judy Bell-Krotoski, Pat Baxter-Petralia, Judy Colditz, Cindy Phillips, Donna Reist, Evelyn Mackin, Karen Lauckhardt, and Elaine Fess. Some of the other flowers in my garden are Judy Leonard, Lois Barber, Mary Dimick, Ros Evans, Ken Flowers, Shellee Bittinger-Godfrey, Pam Kirby, Elaine LaCroix, Donna Breger, Mary Sorenson, Betty Spencer Steffa, and Lynne Wolf. There are other flowers in my garden who are not mentioned here, but you know who you are.

Blessed are the flexible for they shall not be bent out of shape. At this time, there were many significant ongoing changes in the Society and many changes in my own situation. My military career finished. With encouragement from Gloria Hershman, I adopted the motto "Have bag—will travel." Some of the most enjoyable parts of this phase involved the ability to take the best tips from one hand therapy situation and apply them to others, or to share with each clinic some of the helpful hints.

In the early 1980s, the membership of the ASHT grew by about 35 therapists a year. I followed Evelyn Mackin as treasurer. Those were the early, pre-Central Office days, when the treasurer sent out the dues notices, collected the money, paid the bills, and invested the remainder. Our budget was less than \$50,000, and it was a trick to keep enough cash on hand to pay the bills that were coming in and to keep the rest of the funds fully invested. The next treasurer had the support of the Central Office and missed some of the networking and some of the detail work.

Growing pains of the Society kept almost everyone involved, and we felt that the Society would change, prosper, and give new direction to hand therapy. It did. In 1986, a group of hand therapists ventured to Japan for the international meeting. Back in 1978, the organization had big debates about our name. We just weren't sure how to phrase it. When our Japanese tour guide asked all the "ah sh-t" members to return to the bus, we just laughed. It happens!

The mind once stretched by new ideas never regains its original dimensions. My interest in techniques and splinting materials continued. Some of the materials that were state-of-the-art in the 1970s are not even on the market today. In 1989, Gloria DeVore and I presented a splinting workshop in Hawaii. For the workshop, I came up with what I thought was a unique and useful way to look at materials: by performance—basically, rubber versus plastic. Today, these classifications have expanded and changed. It's a challenge for the therapist to keep up with all the new materials. Luckily, our *Journal of Hand Therapy* and conferences provide us with wonderful resources.

In the mid-1980s, I became intrigued with the alternative healing techniques of Eastern medicine. Today, I'm a firm advocate of combining Eastern and Western approaches in our healing process. I explored nontraditional information about chakras, Reiki, crystals, magnets, Luo points, and even palm reading. After looking at one client's hand, I made the side comment that perhaps he should be a philosopher. He had magnificent hands. He talked about philosophy as his true calling, but there was much more money in truck driving.

Yesterday is today's memory and tomorrow is today's dream. So, where are we today? The U.S. health service is in transition; therapy is formula-driven, restricted to protocols, time-managed, and reduced to necessary care. The pressure placed on us by business demands may lead us to lose sight of the need for compassion and caring for the patient. This conflict represents a choice between being humanistic and caring or being scientific and objective. How do we choose? We don't. We need both. We need to remember that the concept of caring and touch is the essence of our practice.

We need our research, and we need to become expert in the use of modern computer technology. Here, we can create better evaluations and treatment programs, but we must be careful not to isolate the patient from the therapist with machines. Computer technology and the machines must not substitute for the relationship and energy between the therapist and the patient.

Beyond what we know, there is so much more. The mind-body-spirit concept has come into the public consciousness. Several of the current best-sellers on the mind-body issue are *Spontaneous Healing* by Andrew Weil, *Ageless Body, Timeless Mind* by Deepak Chopra, *The Celestine Prophecy* by James Redfield, *Heal Your Body* by Louise Hay, and *The Power*

of the Mind to Heal by Joan Borysenko. The *Journal of Holistic Nursing* addresses the concept of mind-body-spirit and the use of directing human energies in healing.

The body is a chemical, electrical power plant producing its own energy. It is now known that thoughts and emotions take the form of biochemical substances called *neuropeptides*. The presence of neuropeptides suggests that the mind can be projected everywhere in the body and that the mind and body are closely integrated. Energy is felt, and sometimes seen, beyond the body. Human bodies have an electrostatic field around and within them. You've heard of "auras." We need to be aware of our own energy, the capability of using universal energy and the interaction of the energy between the therapist and the patient.

The future comes one day at a time. The future of splinting will include newer composite materials, better adhesives, and wonderful space-age discoveries. This is exciting. More important, I believe, treatment in the future will include a new dimension. The new dimension involves the integration and combination of our Western medical practices and the ancient and time-honored Eastern practices that have been developing over 3,000 years. With greater awareness of some of the alternative practices, we can encourage our patients to gain more control over their healing and their lives.

Many nontraditional, alternative, or holistic practices are available. Which ones are suitable for hand therapists? I suggest that we can fairly easily incorporate or instruct patients to be aware of some

of the following alternatives for treatment: acupuncture, acupressure, biofeedback, guided imagery, visualization, herbal medicine, holistic medicine, homeopathic medicine, and therapeutic touch. Therapeutic touch has been one of my treatment modalities for the past 10 years. I've been trained in Reiki, but there are more than 10 types of therapeutic touch. Exploring this area is a workshop in itself.

In summary, I believe that we need to make full use of our modern computer technology, new equipment, and splinting materials. We must not lose sight of the whole patient in treating the injured part. We need to ensure that the patient remains in control of his or her healing. To do this, I firmly believe that we must combine appropriate contributions from Eastern medicine with our own Western medical practice to treat the whole patient.

Every ending marks a new beginning. I thank the ASHT for honoring me with this award. Thanks to the Society, I've grown professionally and have many more flowers in the garden of my life. Because of this award, the initials N.B. will remind me of this day and of Nathalie Barr. But, once again, N.B. will also mean *nota bene*, "note well."

Enjoy life. This is not a dress rehearsal. The future is in your hands. Thank you.

Reference

1. Gibran K: *The Prophet*. New York, Alfred A. Knopf, 1923, p. 68.