
The Healing Power of Touch

How can the design of furniture harness the healing power of touch and promote physical contact between patients, loved ones, and caregivers?

If a picture is worth a thousand words, consider for a moment the worth of a compassionate caress, a pat on the back, a warm embrace, or a firm handshake. Often overlooked, these everyday touches are fundamental to effective communication, the development of loving relationships, and our overall health and wellbeing. The sense of touch develops in the womb and is believed to be the last sense to leave us. While numerous studies confirm many therapeutic benefits associated with touch including reduced stress, improved sleep, improved memory, and improved pain management, Western medicine has been slow to harness its healing powers. Indeed, we live in a touch-deprived culture and unsurprisingly place more faith in medical machines to heal than hands, especially as we live in fear of spreading superbugs. Come explore this amazing sense organ and consider its influence on the design of healing spaces.

Johnson & Johnson's former Chairman and CEO, James Burke, believed strongly in the healing power of touch, even positing that loving touch could save the world from war and disease. Regarding disease-prevention Burke writes, "I think we will develop models suggesting that we can enhance the immune system by touch. I have no doubt that people who are well-loved from birth to death have less disease. I would bet everything I own on that."¹

Despite a large body of research in support of therapeutic touch, Western medical professionals still largely consider touch taboo, emphasizing healing machines over healing hands. Early neonatal intensive care units perhaps best exemplify this bias. Traditionally, babies born prematurely fought for their lives in incubators while parents watched helplessly nearby. Often separated by mere inches, mothers rarely penetrated the walls of the incubator to touch their babies. Units enforced no-touch and minimal-touch policies fearing that such stimulation would be harmful for the babies' fragile states.²

By the 1980s, researchers began to investigate the impact of touch on infant weight gain and the significant results initiated major shifts in neonatal care. In one study, babies who received three 15-minute sessions of massage over the course of a week gained an amazing 47% more weight than the control group receiving standard medical care.³ One of the researchers involved in the study, Tiffany Field, became personally invested in the research after the premature birth of her daughter. Fueled by this life-changing experience and her firm belief in the healing power of touch, Field has since built an entire career exploring the many ways physical touch impacts health and wellbeing.

Early in her career, Field connected with James Burke who shared her belief that touch was fundamental to our survival. Backed by a generous grant from Johnson & Johnson, Field established the world's first institute devoted to the study of touch. Since 1992, the Touch Research Institute at the University of Miami School of Medicine has conducted over 100 studies on the benefits of touch therapies. Their work, especially with regard to infant and childhood development, has helped silence skeptics and challenges the minimal-touch approach too often practiced in medicine.

For example, studies show that a bedtime massage from parents significantly improves the health and wellbeing of children suffering from a range of disorders including diabetes, asthma, and autism. In one study, a twenty-minute bedtime massage over the course of a month helped stabilize glucose levels into the normal range for children with diabetes.⁴ A similar study found that children with asthma who received nightly massages had improved lung functioning and fewer asthma attacks.⁵ Interestingly, autistic children who often dislike physical contact even from family members, actually love being massaged. Daily massages were shown to improve sleep, reduce outbursts in school, and improve relationships with their teachers.⁶

Studies involving adults show significant health benefits as well. Massaged cancer and HIV patients received a boost to their immune systems with an increase of natural killer cells, the immune system's front line of defense.⁷ Touch therapies as a means of coping with chronic pain and stress have become increasingly more common with many companies offering therapies on site as part of wellness programs. An added benefit to employers is that massage increases alertness, possibly impacting productivity. In one study conducted at a medical school, staff received fifteen-minute massages during their lunch break and reported "heightened awareness, much like a runner's high."⁸ Studies show the benefits of massage in treating addiction too. In one study, smokers were taught to self-massage either their earlobes or hands whenever they felt the urge for a cigarette. Amazingly, twenty-seven percent of the participants successfully quit smoking.⁹

Studies show that the benefits of massage therapy extend to the person giving the massage as well. A creative study exploring the impact of massage on the elderly had "grandparent volunteers" either receive massages from therapists or give massages to infants. While both groups experienced health benefits, the effects were greater for those grandparents who gave the massage, "improving their emotional states and self-esteem, as well as lifestyle habits, including drinking fewer cups of coffee per day, making more social phone calls, and taking fewer trips to the doctor's office." One participant exclaimed, "Massaging babies has made me feel alive and young again."¹⁰

There may be more truth to this statement than we know. Investigations into some of the longest-lived populations have revealed strong familial and community ties as a common characteristic of centenarians. National Geographic writer, Dan Buettner has traveled the globe exploring pockets of longevity, or what he calls "Blue Zones" in an effort to discern the behaviors that contribute most to living a long, happy, and relatively disease-free life. In each Blue Zone, robust relationships with friends and family are a common thread. For example in Sardinia, Italy large extended families come together each week to share a home cooked meal. In Okinawa, Japan many people belong to a moai, "a group of friends, neighbors, or others who get together regularly to provide reciprocal support – social, emotional, and financial."¹¹ For many Blue Zones, multi-generational living is common, with assisted-living or nursing homes unthinkable.

Conversely, for many Westerners, aging often results in spending more time alone. Grown children move away to pursue education and employment opportunities. Spouses and close friends pass away. A lack of mobility or loss of a driver's license leads to more time spent at home. These major life-changes often cause American elders to become increasingly more isolated, diminishing their opportunities to receive physical touch.

This is exacerbated by the fact that Americans are one of the least tactile cultures. In an interesting study by psychologist Sidney Jourard, researchers observed diners at cafes in various cities around the world and recorded the number of times they touched over the course of an hour. While English diners never touched, Puerto Ricans managed to touch an amazing 180 times! Americans barely eked out their English relatives with only two touches.¹² Research shows that with the exception of family members and sexual partners, Americans rarely touch one another.¹³

Touch-deprivation is common too for people with skin conditions such as psoriasis. In an interview with a dermatologist about the power of touch, the doctor explained that she intentionally touches patients in plain sight of family members to help them understand that the condition is not contagious. Unfortunately, as electronic medical records have

entered the exam room, such tender moments between patients and caregivers have become hurried or have disappeared altogether. Hunched doctors predominately positioned with their backs to the patient as they furiously enter data on a desktop computer or doctors precariously balancing laptops on their knees during a consultation have become common scenarios.

Technology that impedes physical touch from caregivers may negatively impact patient satisfaction. "In a hospital study, 85% of the touched patients, but only 53% of the untouched patients, responded positively about the hospital and its personnel."¹⁴ Joan Carmichael, a researcher at the University of Miami Department of Family Medicine, offers this suggestion to striking the right balance between technology and healing hands, "Laying-on of hands is not merely folklore or mysticism. Reinstating the backrub as standard hospital procedure could balance the introduction of the CAT scanner."¹⁵

These days, the fear of spreading infection makes such intimate moments between patients and caregivers nearly impossible. In an opinion piece for the *New York Times*, Dr. Pauline Chen writes candidly about the impact of isolation on the patient-caregiver relationship. She recalls a particular case in which a man with a drug resistant infection was placed in isolation. A "Contact Precautions" sign taped outside his room informed all visitors and caregivers to dress in gloves, facemasks, and gowns prior to entering. She describes how the uncomfortable, ill-fitting protective clothing interfered with routine patient exams. Deterred by the inconvenience and awkwardness of the protective gear, caregivers began minimizing their interactions with the man. Over the course of two months, the patient became increasingly more withdrawn and his condition worsened. His room became a crowded collection of life-saving equipment, but amidst all this advanced technology, the man's most basic needs, as a human being, may not have been met. Chen admits,

*"Increasingly isolated in these ways, he began to withdraw from everyone except his wife...The small space in which he was confined eventually became a space-age pastiche of beeping machines, plastic tubes and wires, and shrouded, faceless, hovering yellow figures. When he finally died, from cardiac arrest, more than two months later, it was hard not to remember the weeks leading up to his death and to wonder about one thing. In trying so hard to contain the infection, had we lost sight of the person?"*¹⁶

For some patients, a caregivers' touch may be critical to recovery, providing them with hope and strengthening their will to live. In *Touching is Healing*, Jules Older shares an anecdote about an osteopath who would playfully pinch the big toe of an elderly patient during his examinations. Upon recovery the patient thanks the doctor, "...it is because of you I am still alive...Nobody plays with the toes of a dying man. So I decided I must not be dying after all."¹⁷ In the book *Touch*, Tiffany Field offers a counter example of a patient who escapes from a local hospital and walks home in his pajamas. His reason for leaving? That he had gone fifteen days in the hospital without being touched.¹⁸

According to Dr. Thomas Duffy, professor emeritus at the Yale School of Medicine, the length of a stethoscope is somewhat arbitrary and yet critical to conducting a thorough patient examination. The device allows practitioners to listen to the internal workings of the body, but the tubing length permits them to lean in close, entering patients' personal space with relative ease. This close proximity allows doctors to utilize all their senses including smell and touch, which may in turn impact a diagnosis. This seemingly insignificant act of touch may actually have a profound impact on healing. One study found that "eye contact and a pat on the back from a doctor may boost survival rates of patients with complex diseases."¹⁹

As noted earlier, with the exception of family members, it is rare for people to come in close contact with each other and actually touch. Anthropologist, Edward T. Hall offers an evolutionary explanation for this behavior. In the animal kingdom there exists contact and non-contact species. Contact species, like walruses, “huddle together and require physical contact with each other.” Non-contact species, like dogs and cats, “completely avoid touching.” The distance separating non-contact species from each other is called “personal distance” and acts like an invisible bubble surrounding the animal.²⁰ In his book, *The Hidden Dimension*, Hall uses visual examples to illustrate this point including a memorable comparison of evenly spaced birds perched on a wire placed next to an image of evenly spaced people waiting at a bus stop.²¹ In addition to personal distance, non-contact species also exhibit a “social distance” which Hall defines as “a psychological distance, one at which an animal apparently begins to feel anxious when he exceeds its limits.” According to Hall, advances in technology have greatly “extended” our distance receptors sight and hearing, resulting in an ever-increasing social distance. He writes,

“Social distance in man has been extended by telephone, TV, and the walkie-talkie, making it possible to integrate the activities of groups over great distances. Increased social distance is now remaking social and political institutions in ways that have only recently begun to be studied.”²²

Nearly fifty years since Hall made this observation and man continues to push the limits. Videoconferencing has now made it possible for doctors to conduct patient examinations from many miles away void of any physical contact. Dr. Leif Hass a hospitalist at the Alta Bates Summit Medical Center in Oakland, California offers this insight, “We just have to make sure that in the age of technology and rapid reforms, some of our best tools for healing — simple things like touching people and telling them you care and making them feel you are there for them — don’t get lost.”²³

How can interior design encourage touch between patients and loved ones, patients and caregivers, and even from caregiver to caregiver?

Today on neonatal intensive care units, once babies’ lives are no longer in jeopardy, they move to a growing unit where caregivers highly encourage the hands-on participation of mothers and fathers. Comfortable rocker-recliners accompany each incubator so that mothers and infants can engage in skin-to-skin contact, a technique known as kangaroo care. Studies show that this close contact offers multiple benefits to the baby including deeper sleep, and more regular breathing and heart rates.²⁴

Touch therapies have influenced the design of mother-baby units as well. Today, mothers typically labor, deliver, and recover all in the same room and their babies remain with them for most of this time. Long gone are the days of nurses whisking newborns to the nursery so that mothers can recuperate in quiet. Research has shown that this early contact benefits both the baby and the mother. “Mothers with early contact are more satisfied with their infants and spend more time looking at and interacting with them. Early contact infants cry less and smile more than separated infants.”²⁵

Fathers have become more engaged too. No longer left to pace in the waiting room, fathers now provide support for the laboring mother throughout the entire process, even suiting up in scrubs and holding her hand in the operating room if she must undergo a cesarean procedure. Furthermore, larger private rooms provide a recliner or sleep sofa so that fathers can spend the night and help care for the mother and infant.

Much evidence shows that family support and involvement in patient care can enhance clinical outcomes and increase satisfaction with the



A family-bed chair by IOA Healthcare Furniture and CAMA, Inc. Designed around the healing power of touch, this adjustable-height, three-position recliner promotes family-patient interactions at the bedside. The chair is the first in a new series of products all designed to encouraging physical touch.

hospital experience. Children’s hospitals often understand this better than anyone and view parents as integral members of the care team helping their children cope with fear and pain. Single-bedded rooms are a welcome improvement for parents of a sick child, allowing them to comfort their child in private and remain at their bedside even through the night.

Research shows that private rooms encourage social support more than multi-bedded rooms, largely because there is more space and furniture to support visits from friends and family.²⁶ But what happens when a patient lives far away from relatives? Often a reality for elderly patients, some actually prefer to recover alongside a roommate out of fear of being alone.

Healthcare designers understand the positive impact of social support on healing and plan for it superficially with the addition of furniture, typically chairs, to clinical and recovery spaces. While it is probably safe to assume that inviting friends and family into these spaces increases the likelihood of physical contact, a number of barriers still exist. Culture, fear of infection, and increasingly electronic medical records, all discourage touch. Rarely do healthcare designers dig deeper and explore how the built environment can encourage actual physical touch between patients and loved ones, patients and caregivers, and even from caregiver to caregiver. Yet this subtle shift in thinking may significantly transform healing spaces.

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