

CAMA

WHITE PAPER

BESTofyear INTERIOR
2015 DESIGN

HEALING TOUCH

A HUG A DAY, KEEPS THE DOCTOR AWAY

A COMPASSIONATE CARESS, A PAT ON THE BACK, A WARM EMBRACE, OR A FIRM HANDSHAKE, TOUCH IS 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 the many therapeutic benefits associated with touch, Western medicine has been slow to harness its healing powers. We live in a touch-deprived culture and unsurprisingly place more faith in machines to heal than hands.

This white paper explores this amazing sense organ and consider its vast potential in transforming healing spaces.



LULLABY

Patient and family lie head to head for sustained eye contact, hand holding, and co-sleeping.

TETE A TETE

Patient and family sit facing one another. An ideal position during periods of wakefulness.



EYE-TO-EYE

Improves communication, allowing patients, family, and caregivers to sit at the same level.



The Touch Research Institute at the University of Miami has conducted over 100 studies on the benefits of touch therapies.

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

A bedtime massage from parents improves the health and wellbeing of children suffering from a range of disorders including diabetes, asthma, and autism.

over 100 studies on the benefits of touch therapies. Their work, especially with regard to infant and childhood development, has helped challenge 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

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.



giving the massage as well. A clever 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. Multi-generational living is common, with assisted-living or nursing homes practically unthinkable.¹¹

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 American’s 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 positioned with their backs to patients as they furiously enter data on a desktop computer or doctors balancing laptops on their knees during a consultation have become all too 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 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.”¹⁶

The stethoscope is one great example of a simple, low-tech tool that has a profound impact on the patient-caregiver relationship, according to Dr. Thomas Duffy, professor emeritus at the Yale School of Medicine. A stethoscope allows practitioners to listen to the internal workings of the body, but the tubing length permits them to lean in close, entering a patient’s personal space with relative ease. This close proximity allows doctors to utilize all their senses including smell and touch, which may in

Eye contact and a pat on the back from a doctor may boost survival rates of patients with complex diseases.



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.”¹⁷

These days, the fear of spreading infection makes such 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?”¹⁸

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



For some patients, touch may be critical to recovery, providing them with hope and strengthening their will to live.



I am still alive...Nobody plays with the toes of a dying man. So I decided I must not be dying after all.”¹⁹

With an ever-increasing body of research linking social support with enhanced clinical outcomes and increased patient satisfaction, healthcare providers go to great lengths to accommodate the needs of patients and their families. Children’s hospitals 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, allowing them to comfort their sick child in private and remain at their bedside even through the night.

Today on neonatal intensive care units, caregivers encourage hands-on participation from 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.²⁰

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.”²¹ Fathers are more engaged too, providing support for the laboring mother throughout the entire process. Larger, private rooms provide a recliner or sleep sofa so that fathers can spend the night and help care for the mother and infant.

Healthcare designers understand the positive impact of social support on healing and plan for it by allocating space and specifying furniture with

family in mind. While, inviting friends and family into clinical spaces likely increases physical contact, a number of barriers still exist. Culture, fear of infection, and increasingly electronic medical records, all discourage touch. Rarely do designers 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 the design of healing spaces.



REFERENCES

- 1 Burke, J. (1993, Fall). Touch and wellness. Touchpoints Newsletter 1: 3.
- 2 Field, T.M. (2001). Touch, Cambridge: The MIT Press.
- 3 Field, T.M., Schanberg, S., Scafidi, F., Bower, C., Vega-Lahr, N., Garcia, R., Nystrom, J., and Kuhn, C. (1986). Tactile/kinesthetic stimulation effects on preterm neonates. *Pediatrics* 77 (5): 654-658.
- 4 Field, Touch, 148.
- 5 Field, Touch, 148.
- 6 Field, Touch, 134.
- 7 Field, Touch, 150.
- 8 Field, Touch, 133.
- 9 Field, Touch, 138.
- 10 Field, Touch, 139.
- 11 Buettner, D. (2005, Nov). The Secrets of Longevity. National Geographic. Retrieved from http://www.bluezones.com/wp-content/uploads/2011/02/Nat_Geo_Longevity.pdf
- 12 Jourard, S. M. (1966). An exploratory study of body accessibility. *British Journal of Social and Clinical Psychology* 5: 221-231.
- 13 Field, Touch, 9.
- 14 Fisher, J. A., and Gallant, S. J. (1990). Effect of touch on hospitalized patients. In Gunzenhauser, N., Brazelton, T.B., and Field, T.M. (eds.), *Advances in Touch*. Skillman, N.J.: Johnson & Johnson, 141-147.
- 15 Field, Touch, 17.
- 16 Hass, L. (2010). Losing Touch in the Era of Superbugs? *Annals of Family Medicine*, 8(5), 461-463. <http://doi.org/10.1370/afm.1164>
- 17 Keltner, D. (2010, September 29). Hands On Research: The Science of Touch. Retrieved from http://greatergood.berkeley.edu/article/item/hands_on_research
- 18 Chen, P.W. (2010, Oct. 21). Losing Touch With the Patient. *The New York Times*. Retrieved from http://www.nytimes.com/2010/10/21/health/views/21chen.html?_r=0
- 19 Older, J. (1982). *Touching is Healing*. New York: Stein & Day, 86, 179.
- 20 Anderson, G.C. (1995). Touch and the kangaroo care method. In Field, T.M. (ed.), *Touch in Early Development*, 35-51.
- 21 Klaus, M., and Kennell, J. (1982). *Parent-Infant Bonding*, 2d ed., St. Louis: Mosby.

CASE STUDY

IOA + CAMA BED CHAIR

A COLLECTION THAT HARNESSSES THE HEALING POWER OF TOUCH, PROMOTING PHYSICAL CONTACT BETWEEN PATIENTS, LOVED ONES, AND CAREGIVERS.

The Cama Bed Chair is a height-adjustable, three-position recliner to support close and comfortable interactions at the bedside.

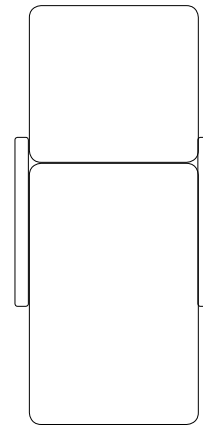
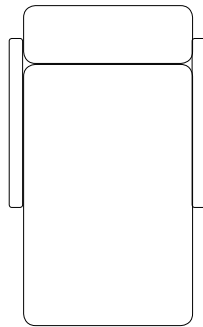
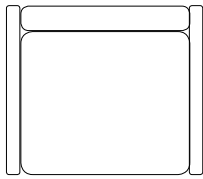
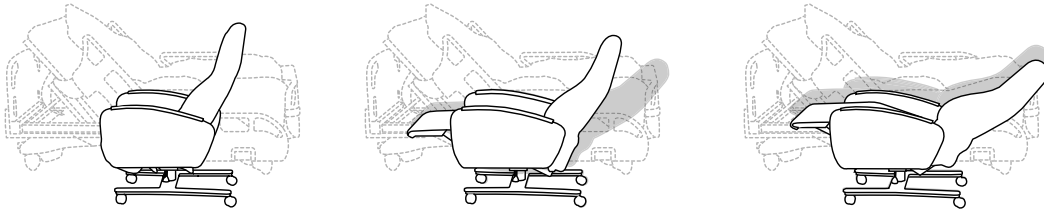
3 Position Recline
Height Adjustable
Wood Arm Caps

Crumb Space
Easily Mobile
Locking Casters

BESTofyear INTERIOR DESIGN
2015



TECHNICAL SPECS



CAMA BED CHAIR
29.5"w x 35/67.5"d x 42"h
seat height: 15.5/20.5"
arm height: 24"

CONSTRUCTION

Solid steel base with molded polyester cover and heavy duty swivel locking casters with 150 lbs load rating each.

Heavy Duty 500 Newton Pneumatic cylinder welded to the base and connected to heavy gauge welded steel top plate and chassis.

Steel seat frame with sinuous springs and high resiliency exile foam cushion.

LOAD RATINGS AND TESTS

The Cama Bed Chair chair has undergone a battery of rigorous testing for strength, durability, stability and performance. It is rated for 350 lbs dynamic loads. Stability tests include a 250 lbs dynamic load drop test applied to the back when fully reclined performed for 20,000 cycles.

