

## VIEWPOINT

## Out of Touch

**Salvatore Mangione, MD**

Sidney Kimmel Medical College of Thomas Jefferson University, Philadelphia, Pennsylvania.

**Maria Basile, MD, MBA**

Center for Medical Humanities, Compassionate Care, and Bioethics, Renaissance School of Medicine at Stony Brook University, Stony Brook, New York.

**Stephen G. Post, PhD**

Center for Medical Humanities, Compassionate Care, and Bioethics, Renaissance School of Medicine at Stony Brook University, Stony Brook, New York.

...[T]ouching was the real professional secret, never acknowledged as the central, essential skill, always obscured...but always busily there, the laying on of hands. There, I think, is the oldest and most effective act of doctors, the touching.

Lewis Thomas<sup>1</sup>

**The skin is our** largest sense organ, and touch is the most interactive of all senses. Not surprisingly, the laying on of hands has been an important part of the physician's toolkit since the dawn of medical care. From the Ebers Papyrus of circa 1550 BCE to the "hand healers" of classical Greece (whose name *kheirourgos* eventually spawned our modern term "surgeons"), touch has been the physician's "professional secret." Not anymore.

First the obsolescence of bedside interaction owing to the lure of diagnostic technology, then the "social distancing" of COVID-19, and ultimately the expansion of telemedicine have all contributed to separate us from patients. Concerns that closeness might be misinterpreted as sexual advance have prompted institutions to offer chaperones for "nonsensitive" areas of the examination, whereas some physicians have started to use gloves for interactions that would not normally require them. The result is such a decline in skin-to-skin contact

## From the Ebers Papyrus of circa 1550 BCE to the "hand healers" of classical Greece..., touch has been the physician's "professional secret."

that one is left to wonder whether today's physicians might be more interested in laying on tools rather than hands. The US editor and author Norman Cousins offered the patient's perspective: "The physician celebrates computerized tomography. The patient celebrates the outstretched hand."<sup>2</sup> In fact, the real question is whether the demise of physical contact might have hurt the patient-physician relationship.

Allogrooming is ubiquitous among primates and mammals. Yet in human beings, physical contact is often a cultural phenomenon, with some societies relishing it more than others. In the commonly cited "Coffee House" study of 1966, the psychologist Sidney Jourard counted how many times couples in cafés touched each other in various countries. In Paris, it was 110 times per hour; in London, never; in San Juan, Puerto Rico, it was more than 180 times; and in Gainesville, Florida, twice.<sup>3</sup> Although this study received criticism, most sociologists would agree that Mediterranean cultures such as those of Spain, France, Italy, and Greece are more comfortable with closeness than northern societies such as the US or the UK. Contact-resistant societies might sub-

stitute their need for touch into pet ownership. For instance, 66% of US households had pets in 2023 compared with only 15% in Greece.

Still, when people are distressed, they want to be touched. "Some people don't like being handled by others," wrote US physician and essayist Lewis Thomas, "but not, or almost never, sick people. They need being touched, and part of the dismay in being very sick is the lack of close human contact. Ordinary people, even close friends, even family members, tend to stay away from the very sick, touching them as infrequently as possible for fear of interfering, or catching the illness, or just for fear of bad luck. *The doctor's oldest skill in trade was to place his hands on the patient* [italics added]."<sup>1</sup>

There are nonetheless individuals who remain uniquely resistant to touch. Individuals with autism spectrum disorders, for example, exhibit a pathologic sensitivity to contact and thus resist it. Yet sick people long for touch. There might be emotional and physiologic reasons. From its soothing effect in cancer management to its release of endorphins, serotonin, and oxytocin, touch triggers a series of events that ultimately result in a sense of relaxation, trust, and cooperation. These changes might have therapeutic value. In fact, touch boosts the immune system by increasing natural killer cells; it lowers blood pressure; activates the vagal nerve; decreases stress-induced cortisol levels; reduces anxiety; and by modulating the endogenous opioid system, it relieves pain.<sup>4</sup> No wonder that the royals of England and France relied for centuries on touch to convince their subjects of the divine and healing powers of kings.

Touch is also crucial for human development. In the 1950s Harry Harlow carried out a series of pioneering experiments that showed how infant rhesus monkeys separated from their mother still managed to thrive through contact with a terrycloth surrogate. Since then, several studies on human infants have demonstrated that touch is a fundamental component of physiologic, emotional, and cognitive development. It might actually prevent cognitive deterioration. In fact, lack of nurturing contact may have devastating consequences. For instance, preschoolers and adolescents deprived of affectionate touch by parents and peers exhibit more aggressive behavior, which is relevant to our times because physical contact among teens has been replaced by "virtual" connection, and loneliness is on the rise. Close to half of "screenagers" report that their "social lives would end or would be greatly worsened if they could not use text messaging."<sup>5</sup> This view is counterintuitive because texting lacks the emotional connection of touch, and it might impair social skills. Either way, kind and gentle touch is such a beneficial form of human communication that the skin has been called "a social organ."

**Corresponding**

**Author:** Salvatore Mangione, MD, Sidney Kimmel Medical College of Thomas Jefferson University, 1001 Locust St, Ste 309C, Philadelphia, PA 19107 (salvatore.mangione@jefferson.edu; salmangione@gmail.com).

Touch has not been the only casualty of modern medical care. Eye contact has been similarly curtailed. Today's trainees, for example, spend just 13.8% of their time at the bedside,<sup>6</sup> with 50.6% looking at computer screens and only 9.4% looking at patients.<sup>7</sup> Besides interfering with the gathering of clinical information, loss of eye-to-eye interaction may hinder empathetic connection, which would be unfortunate because there might be beneficial links between physician empathy and medical outcomes. Systematic reviews of patient-centered care have shown that physicians' verbal and nonverbal behaviors (such as reassurance and support, but also head nodding, forward leaning, and touch) are in fact associated with higher patient satisfaction and adherence to therapy. They might even be healing. Twenty-five hundred years ago, Hippocrates wrote that "some patients, though conscious that their condition is perilous, recover their health simply through their contentment with the goodness of the physician."

That is why the demise of physical examination is such a loss for the art of medicine: it deprives us of our main chance of touching patients. Besides delivering valuable clinical information,

physical examination can foster trust and communication. Laying on hands tells our patients that we are thorough and competent physicians, that we can be trusted, and that we are not afraid of closeness. The former chairman of the University of Miami's Department of Family Medicine, Lynn Carmichael, put it simply: "[T]he good doctor is a good groomer."<sup>2</sup>

So if these nonverbal ways of communicating are crucial for healing, what can we do to preserve them? As always, awareness is the first step: technology is separating us from patients. Yet technology is not the problem. It is only when it becomes an end rather than a means that we risk losing centuries of medical tradition, which would be detrimental not only for patients but also for us. In fact, one wonders whether distancing ourselves might have contributed to the burnout epidemic. A recent editorial suggested that more "involved" ways of practicing medicine could be emotionally taxing, but ultimately more rewarding.<sup>8</sup> In times when loneliness has become epidemic and empathy is in decline, reaching out and touching someone might have enormous benefits.

#### ARTICLE INFORMATION

**Published Online:** February 9, 2024.  
doi:10.1001/jama.2024.0888

**Correction:** This article was corrected on February 14, 2024, to fix an anecdote in the text.

**Conflict of Interest Disclosures:** None reported.

#### REFERENCES

1. Thomas L. *The Youngest Science: Notes of a Medicine-Watcher*. Viking; 1983:49-57.
2. Field T. *Touch*. Bradford Books; 2014. doi:10.7551/mitpress/9959.001.0001
3. Jourard SM. An exploratory study of body-accessibility. *Br J Soc Clin Psychol*. 1966;5(3): 221-231. doi:10.1111/j.2044-8260.1966.tb00978.x
4. Kerr F, Wiechula R, Feo R, Schultz T, Kitson A. Neurophysiology of human touch and eye gaze in therapeutic relationships and healing: a scoping review. *JBI Database System Rev Implement Rep*. 2019;17(2):209-247. doi:10.11124/JBISRIR-2017-003549
5. Lenhart A, Ling R, Campbell S, Purcell K. Teens and mobile phones. Pew Research Center. Published April 20, 2010. Accessed November 18, 2023. <https://www.pewinternet.org/2010/04/20/teens-and-mobile-phones>
6. Rosen MA, Bertram AK, Tung M, Desai SV, Garibaldi BT. Use of a real-time locating system to assess internal medicine resident location and movement in the hospital. *JAMA Netw Open*. 2022; 5(6):e2215885. doi:10.1001/jamanetworkopen.2022.15885
7. Mamykina L, Vawdrey DK, Hripcsak G. How do residents spend their shift time? a time and motion study with a particular focus on the use of computers. *Acad Med*. 2016;91(6):827-832. doi:10.1097/ACM.0000000000001148
8. Berman N. A reason to retire? *N Engl J Med*. 2023; 389(15):1354-1355. doi:10.1056/NEJMp2306534