

Banning the Handshake from Healthcare Settings

Is Not the Solution to Poor Hand Hygiene

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In the early to mid-1800s, puerperal fever was rampant in maternity wards throughout Europe. From his on-the-spot observations, Ignaz Philipp Semmelweis (1818–1865) concluded that students who had performed autopsies on victims of the disease were carrying the infection to healthy mothers in the obstetrical unit. He believed that washing one's hands before examining women in labor could save lives. Although history would prove him right, obstetricians and midwives of that era vehemently rejected his doctrine of cleanliness. He was unable to cope with the strain of such vitriolic controversy, and his brooding brought on insanity. Shortly after he entered an asylum, a wound on his right hand led to his death from the very disease that he had struggled so hard to prevent—streptococcal blood poisoning.¹

Lessons Learned

Thanks to Semmelweis, we have learned a lot about the importance of good hand hygiene. We know, for example, that contaminated hands can transmit pathogens that are capable of causing respiratory, urinary, enteric, cutaneous, and surgical-site infections.²⁻⁴ We know, too, that plain soap and running water—when used for at least 10 to 15 seconds—will remove most transiently acquired organisms.^{3,5,6} Hand-washing, therefore, plays a major role in preventing and controlling contagion.^{3,7-11}

The Problem Continues

Despite well-designed and continually updated regimens for proper hand hygiene, healthcare workers in general, and physicians in particular, fail to comply with hand-washing policies more than half of the time.^{3,10-17} To this day, a handshake between the patient and physician (and between healthcare workers themselves) can do more than convey warmth, welcome, and professionalism.¹⁸ It can also transmit some of today's particularly troublesome pathogens: *Clostridium difficile*, methicillin-resistant *Staphylococcus aureus*, vancomycin-resistant enterococci, and *Escherichia coli*.

A Radical Proposal

In reaction to these persistently poor compliance rates, some investigators have recently proposed a radical solution: banning the handshake from the healthcare setting.¹⁸⁻²¹ Proponents of the ban believe that using alternatives to the handshake would substantially reduce the spread of infection and improve the safety of patients and healthcare workers. The leading alternative is the "fist bump."^{18,20,21} Bacteriologic studies show that fist-bumping is much cleaner than handshaking or giving "high fives."^{18,20,21} Other well-established secular or religious alternatives from around the world include waving, bowing, smiling, looking eye-to-eye at your patient, placing your right palm over your heart, putting your hands (palms together) against your face or chest and tilting your head forward, and touching your patient's shoulder.^{18,19}

Supporters of the ban acknowledge its radical nature. Although they understand the difficulty in persuading patients and members of the healthcare team that handshaking is no longer worthwhile, they argue that the ban has promise, is safe and affordable, and deserves further evaluation.

I respectfully disagree.

Objections to Consider

First of all, if we ban the handshake, we might as well ban the physical examination. Both practices can spread germs. Second, the handshake is a sine qua non of our social

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culture; banning it conveys the impression that patients and those caring for them are harmful to one another. Third, almost 80% of patients want their physicians to shake their hands during the greeting.²² Banning the handshake would deprive them of their wish. Fourth, I see the ban as a cop-out, a move that misses the point. The problem isn't the handshake: it's the hand-shaker. All the physician has to do is make sure that his or her hands are clean before making contact with a patient. Banning the handshake skirts the issue by exonerating the neglectful hand-shaker. It might also cause Semmelweis to turn over in his grave.

Final Thoughts

No other gesture or greeting can duplicate the benefits of a firm handshake. The handshake has long been, and still is, an invaluable bonding tool.

I now wash my hands of this matter.

References

1. Encyclopedia Britannica. Semmelweis, Ignaz Philipp. Chicago: Encyclopedia Britannica, Inc.; 1965. Vol 20, p. 318.
2. Goodman RA. Nosocomial hepatitis A. *Ann Intern Med* 1985;103(3):452-4.
3. Steere AC, Mallison GF. Handwashing practices for the prevention of nosocomial infections. *Ann Intern Med* 1975;83(5):683-90.
4. Gwaltney JM Jr, Moskalski PB, Hendley JO. Hand-to-hand transmission of rhinovirus colds. *Ann Intern Med* 1978;88(4):463-7.
5. Larson EL. APIC guideline for handwashing and hand antisepsis in health care settings. *Am J Infect Control* 1995;23(4):251-69.
6. Boyce JM. It is time for action: improving hand hygiene in hospitals. *Ann Intern Med* 1999;130(2):153-5.
7. Sproat LJ, Inglis TJJ. A multicentre survey of hand hygiene practice in intensive care units. *J Hosp Infect* 1994;26(2):137-48.
8. Pittet D, Mourouga P, Perneger TV. Compliance with handwashing in a teaching hospital. *Ann Intern Med* 1999;130(2):126-30.
9. Beck WC. Handwashing, Semmelweis, and chlorine. *Infect Control Hosp Epidemiol* 1988;9(8):366-7.
10. Squires JE, Suh KN, Linklater S, Bruce N, Gartke K, Graham ID, et al. Improving physician hand hygiene compliance using behavioural theories: a study protocol. *Implement Sci* 2013;8:16.
11. Sprunt K, Redman W, Leidy G. Antibacterial effectiveness of routine hand washing. *Pediatrics* 1973;52(2):264-71.
12. Fox MK, Langner SB, Wells RW. How good are hand washing practices? *Am J Nurs* 1974;74(9):1676-8.
13. Jarvis WR. Handwashing--the Semmelweis lesson forgotten? *Lancet* 1994;344(8933):1311-2.
14. Albert RK, Condie F. Hand-washing patterns in medical intensive-care units. *N Engl J Med* 1981;304(24):1465-6.
15. Erasmus V, Daha TJ, Brug H, Richardus JH, Behrendt MD, Vos MC, van Beeck EF. Systematic review of studies on compliance with hand hygiene guidelines in hospital care. *Infect Control Hosp Epidemiol* 2010;31(3):283-94.
16. Costers M, Viseur N, Catry B, Simon A. Four multifaceted countrywide campaigns to promote hand hygiene in Belgian hospitals between 2005 and 2011: impact on compliance to hand hygiene. *Euro Surveill* 2012;17(18). pii: 20161.
17. White CM, Statile AM, Conway PH, Schoettker PJ, Solan LG, Unaka NI, et al. Utilizing improvement science methods to improve physician compliance with proper hand hygiene. *Pediatrics* 2012;129(4):e1042-50.
18. D'Arrigo T. Is it time to forgo the handshake? [Internet] *ACP Hospitalist* 2014;8(12):32-4. Available from: <http://www.acphospitalist.org/archives/2014/12/handshake.htm> [cited 2015 Apr 6].
19. Sklansky M, Nadkarni N, Ramirez-Avila L. Banning the handshake from the health care setting. *JAMA* 2014;311(24):2477-8.
20. Mela S, Whitworth DE. The fist bump: a more hygienic alternative to the handshake. *Am J Infect Control* 2014;42(8):916-7.
21. Ghareeb PA, Bourlai T, Dutton W, McClellan WT. Reducing pathogen transmission in a hospital setting. Handshake versus fist bump: a pilot study. *J Hosp Infect* 2013;85(4):321-3.
22. Makoul G, Zick A, Green M. An evidence-based perspective on greetings in medical encounters. *Arch Intern Med* 2007;167(11):1172-6.