Personal Hand Gel Improves Hand-Hygiene Compliance

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October 29, 2013

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EDITORS' RECOMMENDATIONS

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- Alcohol Rub, Soap and Water Equal in Presurgical Hand Disinfection
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SAN FRANCISCO — Physicians and nurses on an acute pain service increased compliance rates with their hospital's hand-disinfection policy by nearly 30% by wearing a personal container of antibacterial hand rub, a new study finds.

The simple intervention used a 2-oz (59-mL) bottle of alcohol-based hand sanitizer and a clamp (both *Purell*, Gojo Industries) that attached to a pocket, belt, or hospital identification badge.

Wearing the individual hand-decontamination product improved overall application of the hand gel from a mean of 34% before the intervention to 63% after the intervention, reported lead study author Colby Parks, MD, from the University of Wisconsin Hospitals and Clinics, Madison.

"It's a lot more difficult to forget [to apply hand sanitizer] in a busy healthcare environment when it's on your ID badge," Dr. Parks, a third-year anesthesiology resident, told *Medscape Medical News*.

He presented these findings as a scientific poster here at the American Society of Anesthesiologists (ASA) 2013 Annual Meeting.

According to Dr. Parks, the university hospital has a "gel in, gel out" policy requiring proper hand hygiene by applying hand sanitizer before and after each patient contact. Wall-mounted dispensers of antibacterial hand rub are available throughout patient care areas, as are randomly placed self-standing bottle dispensers.

Personal hand sanitizer dispenser. *Courtesy of Colby Parks, MD*

In an attempt to improve hand-hygiene compliance, which Dr. Parks called "less than ideal," a quality improvement study was conducted in the hospital's nerve block team over 18 days. Study participants included approximately 15 attending physicians, physician trainees, and nursing staff, with 7 to 8 providers on the block team on any given day.

Researchers observed the team members during normal work activities for 9 nonconsecutive days before the intervention and recorded their compliance with the institutional hand-hygiene policy before and after 146 patient-clinician encounters. When the healthcare providers individually received the personal hand sanitizer to wear, they were given information about how to use the dispenser and the reason for the intervention. Subsequently, their hand-hygiene compliance was again recorded for 9 nonconsecutive days during 161 patient encounters.

Compliance (application) rates rose from 23% to 53% before a patient encounter and from 43% to 72% after a patient encounter, according to the abstract.

Table. Effect of Personal Hand Sanitizer on Compliance With Hand-Hygiene Policy

Type of Healthcare Provider	Before Intervention (n = 146) (%)[a]	After Intervention (n = 161) (%) [a]
Attending physicians	33	42
Resident physicians	54	79
Fellows	56	72
Nurses	12	49
Overall	34	63[b]

[a]Patient encounters

[b]Significant difference at $P < .001$ (z test of independent proportions)