

Abstracts #7

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TITLE Improving Adherence to Hand Hygiene Practice: A Multidisciplinary Approach
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“Handwashing is the simplest, most effective measure for preventing nosocomial infections.” Although this has been a medical truth since the time of Semmelweiss, studies today continue to reflect an average compliance rate of less than 50%. While infection control professionals have tried many and varied approaches to the problem, no one intervention has consistently improved hand hygiene compliance.

DEFINITIONS

Resident flora	microorganisms normally residing on the skin
Transient flora	contaminating microorganisms; easily removed by handwashing; causes most hospital infections through cross-contamination
Handwashing	washing hands with an unmedicated detergent and water (or water alone)
Hygienic handwash	washing with an antiseptic and detergent product; degerming
Hygienic handrub	rubbing hands with a small quantity of a highly effective, fast-acting antiseptic

HAND HYGIENE AGENTS

Hand antiseptic agents are designed to rapidly eliminate most transient flora and reduce resident flora as well as retard multiplication through a sustained or residual effect.

Semmelweiss noted that despite handwashing the spread of infection was not halted, and he recommended disinfection. Hand disinfection is significantly more efficient than standard handwashing. Alcohols are considered the preferred method for handrub, or waterless hand hygiene. They:

- Are convenient
- Are quick because of their rapid evaporation
- Spread easily
- Have excellent activity
- Are the most rapid of all antiseptics

Since alcohol has no persistence alone, it is being compounded with another antimicrobial with good persistence with good result.

FACTORS INFLUENCING NONCOMPLIANCE WITH HAND HYGIENE

Factors influencing reduced compliance:

- Physician or nursing assistant versus nurse
- Male
- Work in ICU
- Weekday versus weekend
- Wear gown and gloves
- Use an automated sink
- Perform high-risk activities
- High hand hygiene opportunities per hour of patient care

In the largest hospital-wide survey ever conducted:

- Handwashing compliance decreased when demand for cleansing was high
- Lowest compliance in ICU's (high activity index)
- Highest compliance in pediatrics (low activity index)
- Full compliance with current guidelines may be unrealistic



Kill the HibiGeebies with
HIBICLENS
First & last wash of the day!



- Access to hand hygiene could help improve compliance

Perceived barriers to hand hygiene

- Skin irritation
- Inaccessible supplies
- Interference with patient/worker relationship
- Patient needs a priority
- Wearing gloves
- Forgetfulness
- Ignorance of guidelines
- High workload and understaffing
- Lack of scientific information delineating impact

It is important to note that two of the most important reasons associated with poor compliance (in addition to those mentioned above) are:

- Low risk for acquiring infection from patient
- Belief that glove use obviates the need for hand hygiene

IMPACT OF IMPROVED HAND HYGIENE

One third of all hospital acquired infections are preventable. The spread of microorganisms by HCW hands are recognized as the primary route of pathogen spread. A number of studies have shown a sequential relationship between improved hand hygiene and reduced infection rates.

IMPROVING ADHERENCE

It has consistently been identified that in addition to the factors mentioned above, institutional climate is important in strategic planning and development of hand hygiene programs. In addition, lack of administrative leadership, sanctions, rewards and support play critical roles. Behavioral change is dynamic and change requires not only the identification and recognition of the current situation, but it is essential that the ability and the potential to change are real.

Alcohol based waterless agents address a number of the above-mentioned blocks to compliance: 1.) they require less time, 2.) they act faster, and 3.) they irritate hands less often.

Infection control professionals should promote and conduct outstanding research and provide solutions to improve HCW adherence with hand hygiene and promote patient safety.

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