



Cleanliness of portable medical equipment disinfected by nursing staff (Havill, N. et al. American Journal of Infection Control. 2011)

Abstract

Increased attention has been focused on disinfection by housekeepers, but very little data is available on disinfection of equipment by nurses. Pathogens can reside on shared patient care equipment surfaces, across the healthcare environment. Although protocol and outline of the division of labor across departmental lines for specific tasks may exist, monitoring and providing feedback and improvement can help mitigate risk of pathogen transmission.

Background

Current guidelines recommend that non-critical patient care equipment, defined as medical equipment that comes into contact with intact skin, is cleaned and disinfected between patients' use. This study assessed the cleanliness of mobile rolling blood pressure units between patients' use.

Study

In unannounced visits, mobile medical equipment used to take patient' vital signs were sampled for cleanliness by using adenosine triphosphate (ATP) bioluminescence assay system and aerobic cultures (ACCs). The following sites were tested: control button on the blood pressure unit, electronic thermometer, blood pressure cuff, machine handle, and pulse oximeter.

Results

ATP bioluminescence assays and ACCs revealed that certain mobile equipment are often contaminated with organic material and may be contaminated with aerobic bacteria. The study showed a wide variation in cleaning results despite policies clearly delineating nursing staff as being responsible for the disinfection of such items.

Conclusion

The results of the study identified significant gaps in the cleaning and disinfection of mobile medical equipment. ATP readings that were extremely high revealed that items had not yet been sufficiently disinfected between patients' use. These findings suggest the need to implement systems to improve disinfection of mobile equipment. Previous studies demonstrated that education and feedback, using a quantitative method to monitor performance, led to improved disinfection by the organizations housekeeping staff and could be a useful tool to improve compliance in cleaning and disinfection of shared patient care equipment by nursing staff.

Implications for AHP®

Accelerated Hydrogen Peroxide® (AHP®) is a globally patented leading disinfectant technology with a broad spectrum of efficacy that is proven to reduce healthcare-associated infectionsⁱ.

AHP® Disinfectants are One-Step Disinfectant Cleaners

•AHP® has proven cleaning efficiency resulting in lower costs and faster results as well as added confidence that disinfection can occur

AHP® Disinfectants have realistic contact times

•Short contact times ensure surfaces remain wet for the required contact time, providing comfort and confidence that disinfection has occurred

AHP® Disinfectants provide the perfect balance between safety and efficacy

•AHP's® non-toxic, non-irritating to eyes and skin and non-skin sensitizing formula is designed to be easier on employees and occupants resulting in protocol compliance

AHP® Disinfectants are compatible

•AHP formulations are tested to ensure compatibility that preserves your investments in equipment, furniture, and building surfaces

AHP® Disinfectants are environmentally sustainable

•AHP's® active ingredient, hydrogen peroxide, breaks down into water and oxygen leaving no active residues and will not negatively impact indoor air quality

ⁱ Use of a daily disinfectant cleaner instead of a daily cleaner reduced hospital-acquired infection rate. AJIC 43 (2015) 141-6