CHEMICAL DISINFECTANTS VS STERILE WATER AND COMPOSITE FIBRE:

The Effect of Cleaning Methods on Microbial Contamination in a Class A Pharmaceutical Compounding Environment

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BACKGROUND

Chemical disinfectants have traditionally been used to clean pharmaceutical facilities to ensure acceptable microbiological conditions. However, the use of such agents are costly, time consuming and environmentally undesirable. Exchanging the disinfectant with sterile water and composite fiber cloths was tested in a class A hospital pharmacy compounding environment with regard to effect on microbiological contamination.

PURPOSE

The goal of the project
- acceptable level of microbiological cleanliness
- cleaning with sterile water and composite fiber cloth instead of a traditional chemical disinfectant.

MATERIAL AND METHODS

Microbial monitoring of class A (≥1 cfu/plate)
- Glove print, settle plates and contact plates (Tryptone Soya Agar, Oslo University hospital, Oslo, Norway).

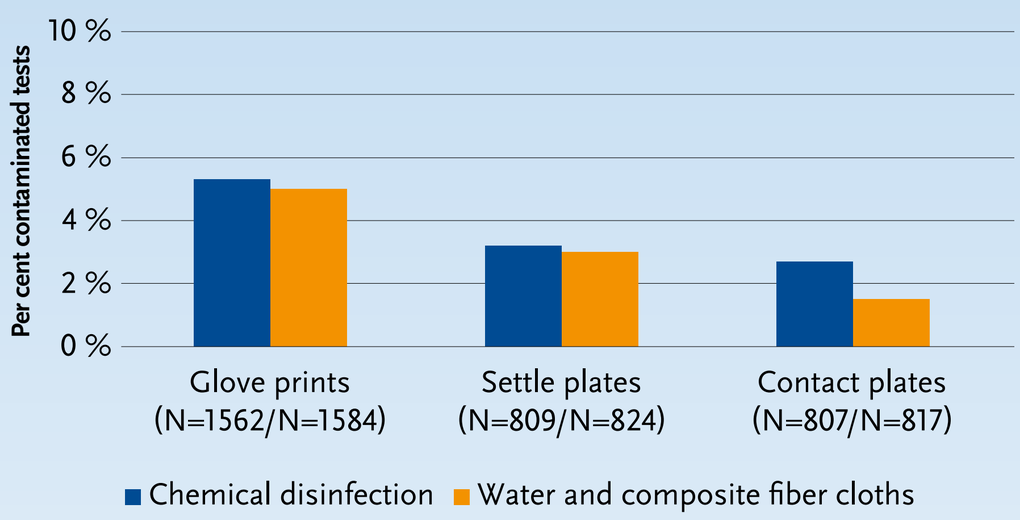
Disinfection of grade A between each production, and surface disinfection of materials to be transferred into grade A
- Klercide Sterile 70% ethanol for (Ecolab, St. Paul, MN, USA).

Sterile chemical disinfectants
- *Klercide Quat / Biguanide, Amine, Sporicidal low residue peroxide and Neutral detergent* (Ecolab, St. Paul, MN, USA).

Sterile water and composite fiber cloths
- Viima (De forenede dampvaskerier, Maribo, Denmark).

RESULTS

The figure below shows the rate of contaminated tests as per cent of total tests in a 24 months period (N)



CONCLUSION:

The level of microbiological contamination in class A hospital pharmacy compounding environment are maintained when cleaning with sterile water and composite fiber cloths, compared to traditional cleaning witch chemical disinfectants.

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