

## Reduction of healthcare-associated infections in a long-term care brain injury ward by replacing regular linens with biocidal copper oxide impregnated linens

**Gadi Borkow**

Cupron Scientific, Israel

**Background:** Contaminated textiles in hospitals contribute to endogenous, indirect-contact, and aerosol transmission of nosocomial related pathogens. Copper oxide impregnated linens have wide spectrum antimicrobial, antifungal and antiviral properties. Our aim was to determine if replacing non-biocidal linens to biocidal copper oxide impregnated linens would reduce the rates of healthcare-associated infections (HAI) in a long-term care ward.

**Methods:** We compared the rates of HAI in two analogous patients' cohorts in a head injury care ward in two 6-months parallel periods before (Period A) and after (Period B) replacing all the regular non-biocidal linens and personnel uniforms with copper oxide impregnated biocidal products.

**Results:** During Period B, in comparison to Period A, there was a 24% reduction in the HAI per 1000 hospitalization days (HD) ( $P < 0.05$ ), a 47% reduction in the number of fever days ( $> 38.5^{\circ}\text{C}$ ) per 1000 HD ( $P < 0.01$ ), and a 32.8% reduction in total number of days of antibiotics administration per 1000 HD ( $P < 0.0001$ ). Accordingly there was a 19.8% and 25% reduction of antibiotics and disposable products expenses per 1000 HD, respectively, during period B.

[gadi@cupron.com](mailto:gadi@cupron.com)