

## THE ROLE OF SURFACES IN TRANSMISSION OF NOSOCOMIAL INFECTIONS AT THE REGIONAL HOSPITAL OF KORCA, ALBANIA

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### BACKGROUND

Hospital surfaces are potential sources of health care-associated infection. Contamination of hospital surfaces by bacteria is increasingly recognized. In recent years, a variety of interventions have been shown to be effective in improving cleaning and disinfection of surfaces.

### OBJECTIVE

The purpose of this study was to:

- ❖ Identify the microbial pollution of the hospital surfaces
- ❖ Demonstrate the importance of hospital surfaces contamination in the transmission of nosocomial infections.

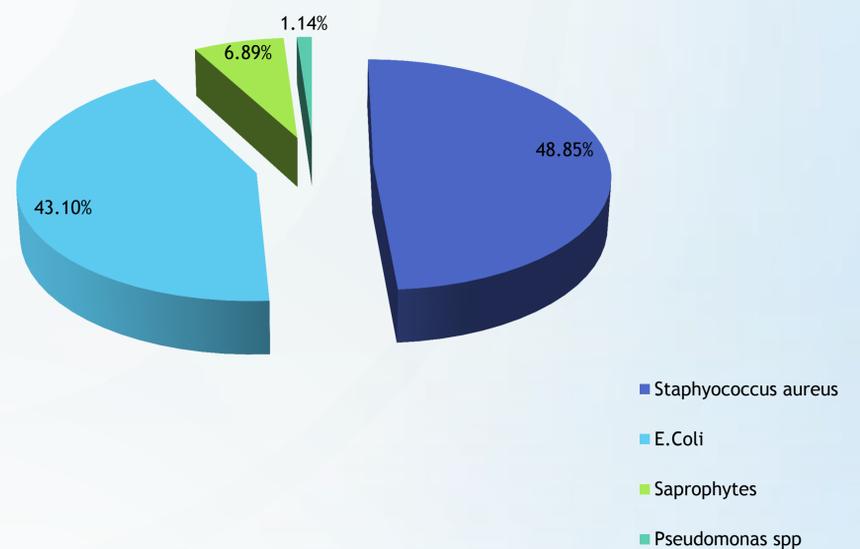
### METHODOLOGY

A total of 640 samples were taken from the surfaces of the hospital. A swab soaked in nutrient broth was used to collect samples. Swabs were streaked in Blood agar. These culture plates were incubated at 37°C for 24 hrs. After incubation identification of isolates was performed. The microbial identification was done with the classic methods of microbiology: microscopy after Gram coloration, colonies morphology and biochemistry.

### RESULTS

- ❖ The prevalence of bacterial isolates was 27.18%.
- ❖ The prevalence of samples contaminated with *Staphylococcus aureus* was 48.85%
- ❖ The prevalence of samples contaminated with *E.Coli* was 43.10%
- ❖ The prevalence of samples contaminated with *Pseudomonas spp* was 1.14%
- ❖ The prevalence of samples contaminated with Saprophytes was 6.89%.

Figure 1. Prevalence of microbial isolates



### DISCUSSIONS

The prevalence of positive isolates from the surfaces samples at the Regional Hospital of Korca was high ( 27.18%). Prevalence of pathogens microorganisms *Staphylococcus aureus* and *E.Coli* was almost the same, respectively 45.85% and 43.10%. Prevalence of Saprophytes and *Pseudomonas spp* was low

### CONCLUSION

- ❖ Several nosocomial pathogens have been demonstrated to persist in surfaces for hours to days.
- ❖ The microbial contamination of surfaces in the hospital is high.
- ❖ High prevalence of microbial isolates with *Staphylococcus aureus* and *E.Coli* are considered as a indicator of poor hygiene in the hospital.
- ❖ Improvement of cleaning and disinfections methods promise to reduce nosocomial infections

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