ESSENTIAL OIL MIXTURE REDUCES BACTERIA AND FUNGUSES IN THE HOSPITAL

That essential oils are disinfectant i.e. Antibacterial, antifungal and antiviral - has long been known to those who work with essential oils in the healthcare system. It is also the subject that is the best studied one through scientific studies.

There is now a new study from the University of Milan (Italy) Abstract: Essential oils reduce bacteria and funguses in the hospital “In an Italian hospital, the antimicrobial effects of essential oils have been demonstrated through room fragrance. It was examined whether room fragrance i.e. Nebulization from a mixture of essential oils that reduces germs such as bacteria and fungi.

Before the start of the study and afterwards, tests were carried out every 30 days by swabbing contaminated tables, cupboards and handrails for Enterococcus faecilis, Escherichia coli, Proteus vulgaris, Salmonalla typhimurium, Staphylococcus aureus, Candida albicans, Aspergillus niger and Saccharomyces cerevisiaia. For this purpose, correct documentation of prescriptions and times of intake of medicines against infections of 32 patients was carried out. Research was carried out on two different, but equally divided floors. One disinfects with conventional disinfectants, the other nebulizes the essential oil mixture in two of eight rooms at night for 8 hours with the doors closed, during the day the doors were opened, so that the air in the hallway and other rooms could circulate.

RESULT
Germ reduction of bacteria and funguses:

• of tables> 90%
• Cupboard areas> 75%
• Complete sterility was found on the tables that were most contaminated.
• In the last 30 days of study, room scenting was suspended and the number of germs increased as before the start of the study.
• The prescriptions and duration of medication, especially for respiratory infections, were lower on the floor that used essential oils by 80% and 86% than on the floor using conventional disinfectants. ”

REIMA® AirConcept GmbH
Seiferitzer Allee 7
08393 Meerane, Germany

www.duftmarketing.de
info@duftmarketing.de

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08393 Meerane, Germany

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info@duftmarketing.de

That means:
• 70% less antibiotic intake
• 100% less revenue from expectorant products
• 100% less revenue from bronchodilators
• 67% less need for steroidal anti-inflammatory drugs
• 33% less need for non-steroidal anti-inflammatory drugs
It is exciting, that no side effects such as e.g. B. allergic reactions to essential oils occurred.

CONCLUSION
The essential oil mixture effectively reduces bacteria and funguses and reduces the intake of antibiotics, bronchodilators, steroidal anti-inflammatory and non-steroidal anti-inflammatory drugs.

Air dispersed essential oils combined with standard sanitization procedures for environmental microbiota control in nosocomial hospitalization rooms.

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Gelmini F1, Belotti L2, Vecchi S1, Testa C3, Beretta G4.

Author information

1 - Department of Pharmaceutical Sciences, University of Milan, Italy.
2 - Fondazione „Don Ambrogio Cacciamatta“, Iseo, Italy.
3 - Functional Point S.r.l., Laboratorio di Microbiologia e Virologia, Bergamo, Italy.
4 - Department of Pharmaceutical Sciences, University of Milan, Italy. Electronic address: giangiacomo.beretta@unimi.it.

Abstract

OBJECTIVE:
Environmental bacterial contaminant microorganisms are an ongoing problem in hospitals. Essential oil vapours (EO) may help reducing this type of contamination. Aim of this study was to evaluate the efficacy of nebulized selected essential oils (EO) in reducing the microbial contamination in residential health care house rooms.

DESIGN:
The study was carried out in a two-story 112-bed tertiary care structure (approximately 1060 m(2)). Contamination in rooms and corridors was monitored for a total of n=5 months, including a starting baseline sampling and one end-study point, and without combined treatment (standard sanitization alone). Contact slides were collected for microbiological analysis.

RESULTS:
Reductions in both bacterial and fungal contamination were observed between rooms cleaned using standard sanitization alone or in combination with essential oils nebulization (average 90% decrease for total count, $P<0.01$; 90% for yeasts and molds, $P<0.05$). Decreases of antibiotic (70%), mucolytic (100%), bronchodilators (100%), and steroidal (67%) and non-steroidal anti-inflammatory drugs (33%) prescriptions were observed, with no adverse effects on patients.

CONCLUSIONS:
The selected EO composition is effective in reducing both the environmental microbial contamination and pharmaceutical drugs consumption in a nosocomial health care house. This study demonstrates that aerial EO diffusion combined with standard sanitization procedures, has great potential to reduce the microbial contamination in critical hospital environments such as hospitalization rooms.

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Seiferitzer Allee 7
08393 Meerane, Germany

www.duftmarketing.de
info@duftmarketing.de