

Title: The importance of using herbs in the prophylaxis of infectious disease in immunosuppressed patients

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Abstract

Infectious diseases are the major causes of death worldwide in conditions where antibiotics have no effect. The patients with chronic diseases, immunocompromised are most vulnerable to infectious diseases. In these cases the prevention of severe infections would be the only chance of survival. Not always vaccines may come save these immunocompromised because differ greatly from one case to another. A long-term therapy with crude extract of herbs whose antibacterial activity has been acknowledged since ancient times, it could be a lifesaving in many critical situations. The aim of this study was to find compounds with antibacterial activity, derived from the secondary metabolism of *Eugene caryophyllata*, *Rosmarinus officinalis* and *Nigella sativa* spices, by TLC. To highlight the antibacterial activity, 80 bacteria were isolated from nosocomial infections from patients with chronic diseases. The three spices extracts were obtained by hydrodistillation to be tested *in vitro*. Antimicrobial activity was between 7.8 ml / ml and 31.25 $\mu\text{L}/\text{mL}$ extract of *E. caryophyllata*, 15.625 $\mu\text{L}/\text{mL}$ and 62.5 $\mu\text{L}/\text{mL}$ for *R. officinalis* and 31.25 and 125 $\mu\text{L}/\text{mL}$ for *N. sativa*. The importance of knowing the mode of action of the compounds spices against bacteria would be an advantage in stopping bacterial infections and their transmission for immunocompromised.

Biography

Roman Luminita 2015 PhD student at the Faculty of Biology, University of Bucharest Romania. I have published 12 papers in prestigious journals and I have participated in numerous national and international conferences and symposiums.

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