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## Antibacterial activity of Sudanese bee honey: Laboratory and clinical evaluation

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Honey is recognized as an effective topical treatment of burns and wounds. In many cases it is being used with success on infections not responding to standard antibiotic and antiseptic therapy. Fifteen samples of bee honey from different localities in Sudan were tested against five standard bacterial strains; *Bacillus subtilis*, *Staphylococcus aureus*, representing Gram positive bacteria, and *Escherichia coli*, *Klebsiella pneumoniae* and *Pseudomonas aeruginosa* representing Gram-negative bacteria. All honey samples exerted inhibitory effects on both Gram-positive and Gram negative organisms. The clinical isolates obtained from infected wounds of twelve hospitalized patients at Omudrman Teaching Hospital, showed seven *Pseudomonas* and five *Staphylococcus* according to the cultural, microscopically and biochemical characteristics. All honey samples exerted inhibitory effects against the clinical isolates. Daily applications of honey on septic wounds, chronic wounds, ulcers and pyogenic abscess of the twelve hospitalized patients, gave favorable results, typified by promotion of granulation tissue and epithelization of the infected wounds.

### Biography

Mahasin Wadi completed the PhD from AL Neelain University, Medical Microbiology, Faculty of Medical Laboratory Sciences 2010 Khartoum Sudan. MSc. University of Khartoum, Sudan. Medical Microbiology & Pharmacology 1987. She joined work at Dar ALUloom University, College of Medicine, Riyadh , Saudi Arabia August 2014, She worked at the central research laboratory Khartoum , Sudan. She joined work at King Saud University, Saudi Arabia, Riyadh 1988, Department of Clinical Laboratory Science and Medical Microbiology. She worked in the area of Bee Honey as a natural antimicrobial product. She published a numbers of papers in reputed journals and participated in many Internationals and National conferences. She issued a patent research about the antimicrobial activity of Sudanese bee honey. She attended many workshops and seminars. Awarded certificate of prestigious Author for the *Journal of Bacteriology & Parasitology* 2011. Awarded a medal on participating in workshop at King Saud University Saudi Arabia 2011. Awarded many appreciation and thanks certificate in scientific activities. Member of many international associations: German Apitherapy Society, American Apitherapy Society, International Bee Research Association, European Society of Clinical Microbiology and Infectious Disease ESCMID and Sudanese Veterinary Association. She served as reviewer of various journals.

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