Some methods for combating of superbugs

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Superbugs is the term which used for describing of multidrug-resistant organisms that evolved and developed resistance to at least one type of antimicrobial drug or antibiotic. MRSA, VRE, ESBLs are some examples on superbugs. The combating of superbugs can be achieved by proper hand washing and using of good hand hygiene. DNA Sequencing of superbugs playing an important role in combating of spread such as DNA sequencing from patient and compared with database for determining source of infection. Using of Nano-based therapy for combating of superbug such as using of nano metals and metallic oxides which having high activity against broad spectrum antibiotic resistant bacteria such as AgNPs which having high activity against MRSA and silver resistant E. coli, also using of Nano-enabled antibiotics such as using drug delivery system and using of other methods such as cellulose nano crystals-porphyrin, CNTs and others. Other solution for combating of superbugs is prevent of antibiotic misuse and overuse which due to developing of resistant for antibiotics via one or more mechanisms of DNA alteration. Essential oil having a new weapon for combating of superbugs, oil is derived from variety of natural sources including plants or component of plants such as flowers, leaves and others, these oil having complex mixtures of chemicals which having antimicrobial activity. Phage therapy is plays an important role for fighting of drug-resistant pathogens.

Biography

Samer M Al-Hulu is an Assistant Professor of Microbiology. He has completed his PhD from College of Science, Babylon University. He has published more than 14 papers in microbiology field. He has trained at Ministry of Health at Laboratory of Babylon Maternity and Children Hospital. Presently, he is working at College of Food Science, Al-Qasim Green University.

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