

Abstract

In the present study seven different antibiotics were used against five different strains of bacteria such as Methacillin resistant Stayphylococcus aureus, Enterococcus faecalis, Acenitobacter bauminnii, Klebsiella pneumonia, Pseudomonas aeruginosa. For Methacillin resistant Stayphylococcus aureus Cefoxitin, Penicillin and Cotrimoxazol was resistant out of seven antibiotics. The zone of inhibition for all these three antibiotics were from resistant to sensitive range after combination with plant extracts. For Enterococcus faecalis Ciprofloxacin, Levofloxacin, Penicillin, Amoxicillin, Imipenem and Vancomycin were resistant after treatment with the plant extracts Ciprofloxacin, Levofloxacin, Imipenem and Vancomycin zones of inhibition were from resistant to sensitive range. An increase in zone sizes was observed for the Penicillin but it remains resistant while no zone of inhibition was observed for the Amoxicillin. For Acenitobacter bauminnii Ciprofloxacin, Levofloxacin, Ceftriaxone and Ceftazidime and Imipenem were resistant. After combination of these antibiotics with plant extracts change zone sizes were observed for Levofloxacin and Ceftriaxone but they were not considerable as it remains in the resistance and Intermediate ranges. No zone of inhibition were observed for Ciprofloxacin, Ceftazidime and Imipenem. For Klebsiella pneumonia all the antibiotics were resistant. An increase in zone sizes was observed after combination with plant extracts for Ceftazidime and Imipenem in Klebsiella pneumonia but it remained in the resistance category. No zone of inhibition was observed for Pseudomonas aeruginosa before or after using plant extracts against any antibiotic. . This study suggest that the plant extracts can be used as antibiotic resistance reversal agent that have no side effects on human body and can reverse antibiotic resistance naturally.