

## **Prevalence of methicillin-resistant *Staphylococcus aureus* in eight African hospitals and Malta**

### **Abstract:**

Methicillin-resistant *Staphylococcus aureus* (MRSA) poses a serious therapeutic problem worldwide, and its frequency in most African countries has not been reported. This study was aimed at determining the prevalence and antibiotic susceptibility patterns of MRSA in eight large hospitals (>500 beds) in Africa and Malta, from 1996 to 1997. Susceptibility to methicillin (oxacillin) and to other drugs was determined by E test (AB Biodisk, Solna, Sweden) on a total of 1440 clinical isolates of *S. aureus*. Methicillin resistance was detected in 213 (15%) of the 1440 isolates tested. The rate of MRSA was relatively high in Nigeria, Kenya, and Cameroon (21-30%), and below 10% in Tunisia, Malta, and Algeria. All MRSA isolates were sensitive to vancomycin, with MICs  $\leq$  4 mg/L. The isolates were also highly sensitive to ciprofloxacin, except in Kenya, Morocco, and Tunisia, where relative resistance to this drug was noted. Susceptibility to rifampin and fusidic acid seems to be correlated with the clinical use of these compounds. Only 46% of 59 MRSA strains analyzed were susceptible to rifampin, fusidic acid, and ciprofloxacin. The majority (> 60%) of MRSA strains were multiresistant. There is a need to maintain surveillance and control of MRSA infections in Africa