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## Incidence and antibiotic susceptibility profile of *Staphylococcus aureus* on door handles in Ahmadu Bello University, Zaria

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Pathogen microorganisms implicated in most diseases are transferable through contact with infected persons or objects. In this study, door handle in the Faculty of Pharmaceutical Science and Amina female hostels in Ahmadu Bello University, Zaria were evaluated for the presence of *Staph. aureus* and their antibiotics susceptibility profile using standard microbiological methods. The result showed that out of the 143 door handles sampled (Amina female hostel=89, Pharmacy main block=40, Pharmacy old block=14), the incidence of *Staph. aureus* was 23.8% (34) with highest occurrence in Amina female hostel (16.8%), followed by Pharmacy main block (4.2%) and Pharmacy old block (2.8%). The antibiotic susceptibility profiles of the isolated *Staph. aureus* showed that the isolates were 100% susceptible to Ciprofloxacin, Erythromycin and Tetracycline, 97% susceptible to Mupirocin and Cotrimoxazole, 92% to Pefloxacin and Oxacillin, while 9% susceptible to Cefotaxime. Their levels of resistance to the selected antibiotics were very low (3% resistant to Mupirocin and Cotrimoxazole, 8% to Pefloxacin and Oxacillin) except to Cefotaxime of 91% resistance. The result showed that the selected antibiotics are still effective against *Staph. aureus* isolated from door handles in Ahmadu Bello University (A.B.U), Zaria. The high incidence of *Staphylococcus aureus* in this study might be attributed to poor hygiene among students and the possibility of transferring pathogenic *Staph. aureus* through door handles in densely populated environ during disease outbreak is suspected. To curb the spread of pathogenic and resistant *Staphylococcus aureus*, this study suggest that door handles in A.B.U, Zaria should be replaced with metallic copper surfaces with antimicrobial properties and frequent use of disinfectant/hand sanitizer is recommended. Also proper periodic antibiotic surveillance should be encouraged to have referable documentaries in disease outbreak.

### Biography

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