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Bacterial Contamination of White Coats among Medical Students and Interns

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Bacterial Contamination of White Coats among Medical Students and Interns

BACKGROUND & OBJECTIVES: White coats, an accepted part of medical practice, are a potential fomite for hospital-acquired infections. They are linked to colonization by nosocomial pathogens. The study was done to assess the level and type of bacterial contamination of white coats, and the relation between white coat handling practices and contamination. **METHODS:** A total of 55 medical students and 55 interns participated in this cross-sectional study. Samples were obtained from the collar, pockets and sides of the coat and examined according to standard laboratory procedures. The participants were asked to fill a questionnaire to assess white coat handling practices. **RESULTS:** Of the 110 white coats examined, 109(99.1%) were contaminated. The sides and pockets of the coats were more contaminated than the collars ($p=0.01$). The most commonly isolated organism was *Staphylococcus aureus* [182(40%)], of which 55(30.2%) were MRSA. Among the Gram negative isolates *P aeruginosa*, *Klebsiella* spp, *Acinetobacter* spp, showed significant resistance to important drugs used clinically. There was no statistically significant association between contamination of white coats, duration of use, frequency of washing, cleaning agents employed and place of wash. Most of the participants (74.5%) cited 'uniform' as the reason for wearing white coat. **INTERPRETATION & CONCLUSION:** Considering the high rate of bacterial colonization of the coats, it is necessary to enforce measures to control contamination and hence prevent cross-infection.