## Headphones: Do They Pose A Threat?

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Sharing of public headphones available in medical faculties can be a potential health threat as they play a role as vectors for nosocomial pathogens including deadly methicillin resistant Staphylococcus aureus (MRSA), as medical students are constantly exposed to the hospital environment. Hence this study was conducted in order to assess microbial contamination in headphones at Information Technology laboratory (IT Lab) of Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka. Both earpieces of twenty headphones, which were selected from the IT lab of the faculty, were swabbed and the swabs were vortexed with sterile saline, and 0.1ml each was introduced to Blood Agar, MacConky Agar and Sabourauds Dextrose Agar. They were spread plated, and incubated for isolation of bacteria and fungi. Standard techniques were carried out for the enumeration and identification of microorganisms and MRSA screening was carried out. Bacteria were found in all 20 (100%) headphones each having >300 CFU/swab, including Staphylococcus aureus, coagulase negative Staphylococci, Streptococcus spp., gram negative cocci, gram positive bacilli, oxidase negative non lactose fermenting organisms and Pseudomonas spp.Four out of 20 (20%) headphones had MRSA. Fungi were found in 8/20 (40%) headphones, including Aspergillus fumigates, Aspergillus niger, and Penicillium spp. In conclusion the headphones tested contaminated with potentially pathogenic microbes including MRSA. Regular cleaning of headphones with non-damaging disinfectants and good hand hygiene is recommended for users in order to prevent this health hazard. Permitting use of private headphones within the IT Lab would be helpful in preventing the spread of potentially pathogenic infections.

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