Prevention potency of soaps and disinfectants on Vancomycin resistant *Enterococcus faecalis* infection

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Bactericides are an essential part of infection control practices and aid in the prevention of bacterial infections. This work investigates the antibacterial effectiveness of four brands each of disinfectants, antiseptic and ordinary soaps purchased from different supermarkets in Osogbo and Ado-Ekiti, Nigeria against selected *Enterococcus fecalis* strains, using standard methods. The disinfectants include Septol, Dettol, Purit and Izal. The soaps assessed were Medisoft, Robert, Tetmosol, Tura, Lux, Morning-Fresh, Mama-Gold and Canoe. Two of the disinfectants (Septol and Purit) had the highest growth inhibition of the test isolates (55% and 65%, respectively). Anti-bacterial effectiveness of ordinary soaps; Mama-Gold, Morning-Fresh, Premier and Lux were recorded as 10%, 15%, 15% and 20%, respectively, followed by antiseptic soaps (Medisoft-30%, Tura-40%, Robbert-35% and Tetmosol-50%).

The effect of holding time on the rate of kill of soaps and disinfectants does not show any significant difference except in Purit with highest at 100 seconds. This research concludes that disinfectants have higher prevention potency on Enterococcal pathogens with high records of inhibition (55% and 65%) of Septol and Purit on *Enterococcus faecalis* strains as against the inhibition of antiseptic soap, Tetmosol (50%) and ordinary soap, Lux (20%). Hence, the use of disinfectants and antiseptic soaps should be encouraged in our food canteens, to prevent the spread of enterococcal infections.

Biography

Olawale A K is a PhD holder, Medical Microbiologist and Chief Lecturer at the Osun State Polytechnic, Nigeria. His research activities include: Medical Bacteriology, Environmental Microbiology and Public Health Microbiology. He has made some modest contributions in these major areas of microbiology with notable publications in peer reviewed learned national and international journals. Histo-pathological changes induced in animal model by potentially pathogenic *Enterococcus faecalis* strains recovered from ready-to-eat food outlets in Osun State, Nigeria.

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