



Occurrence of *Staphylococcus aureus* and *Escherichia coli* in Indian Currency and Effect of Sanitizers and Hand wash on it

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Abstract : Currency of different values was critically evaluated to check the contamination and isolate some pathogenic microbes. The genera of bacteria that isolated in the present study were *Staphylococcus aureus* and *Escherichia coli*. Microbial population was observed more in case of paper currency. It was assessed that currencies act as environmental vector for transmission of microorganisms. These isolates were commonly responsible for food borne illness, diarrhea, gastrointestinal diseases etc. To create public awareness and personal hygiene after handling currency, the study was conducted to evaluate efficacy of sanitizers and hand washes against the isolates obtained. The susceptibility test was

performed by agar well diffusion method against *E.coli* and *Staphylococcus aureus*. *E.coli* was more susceptible to sanitizers and hand wash as compared to *Staphylococcus aureus*. Sanitizers and hand washes showed different degree of antibacterial activity. The study illustrates that the bacterial isolates from currency samples were susceptible to Lifebuoy sanitizer with zone of inhibition ranging between 19mm to 16mm diameter while Dettol sanitizer was not active against both test organism.

Keywords: Currency, *E.coli*, *Staphylococcus*, Sanitizer, Hand wash.

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Introduction:

The word 'money' originated on the Capitoline Hill, one of the Seven Hills of Rome. Money is referred to as a currency which is basically in the form of notes and coins. Currencies are most widely used for the purchase of goods and are contaminated with many pathogenic microorganisms. This can play an important role in the transmission of potentially virulent microorganisms which can cause various health disorders.

Composition of money is such that it provides hostile environment for microorganism to grow.