Bacteriological quality of household stored drinking water in two slums in Minna, North Central Nigeria.

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Abstract
A study of the bacteriological quality of household stored drinking water in two slums, Makera and Tunga maji, in Minna, Nigeria was carried out. Water samples were collected from 32 households in these slums and were subjected to bacteriological analysis. Total viable counts (TVC) for water samples collected from Makera slum ranged from $2.3 \times 10^5$ cfu/ml to $18.0 \times 10^5$ cfu/ml while the TVC for Tunga maji slum ranged from $2.1 \times 10^5$ cfu/ml to $16.0 \times 10^5$ cfu/ml. Makera slum had total coliform counts (TCC) ranging from 210MPN/100ml to 1100MPN/100ml while Tunga maji slum had TCC ranging from 120MPN/100ml to 1100MPN/100ml. The bacteria identified in the water samples were Klebsiella pneumoniae, Escherichia coli, Staphylococcus aureus, Bacillus subtilis and Micrococcus luteus. Klebsiella pneumoniae had the highest (31.37%) frequency of occurrence followed by Bacillus subtilis which had a frequency of 13.73% while Micrococcus luteus had the least (1.96%) frequency of occurrence. The pH of the water was 6.0 - 6.83 for Makera slum while that of Tunga maji slum was 6.10-7.15. One household in Makera slum had all five bacterial genera present in its stored drinking water. Water samples analyzed from all households were contaminated and should be boiled or filtered before drinking.

Keywords: Bacteria, quality, water analysis, slums, household.

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