MICROBIOLOGICAL QUALITY OF PACKAGED DRINKING WATER BRANDS MARKETED IN MINNA METROPOLIS, NORTH CENTRAL NIGERIA.

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ABSTRACT

The sale and consumption of packaged water is increasing by the day in Nigeria and this increase is attributed to the fact that there is inadequate supply of portable water in urban areas. This study investigated the bacteriological quality of packaged water at point-of-sale in Minna, North central Nigeria with emphasis on the incidence of pathogenic bacteria in samples tested. Twenty samples comprising 5 bottled and 15 sachet water brands purchased randomly all over Minna city were analyzed for presence of bacterial indicators of water quality. Standard microbiological procedures were used to investigate incidence of pathogenic bacteria such as Salmonella shigella and indicator faecal coliforms. Results showed that 60% of the sachet water samples examined were either untreated or produced under unhygienic conditions. However, all the bottled water analyzed tested negative to E coli, total coliform, Salmonella shigella and total bacteria count. Most of the sachet water brands fell below SON, NAFDAC and WHO drinking water standards and are therefore of doubtful quality. Efforts need being intensified in the monitoring of activities in this rapidly expanding industry with a view to raising standards of its purity for consumption.

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Received: July 25th 2011

Accepted: October 19th 2011