

## **Drinking water quality and antibiotic resistance of *E. coli* and *Salmonella* spp. from different sources in Gweru urban, Zimbabwe**

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### **Abstract**

The study focused on assessing drinking water quality from different sources in Gweru urban. Seventy six samples were collected from 6 different locations and analysed for physicochemical parameters and microbial quality. Bacteria isolates were identified using matrix-assisted laser desorption ionization-time of flight mass spectrometry and antibiotic susceptibility was determined for 4 isolates that had been identified as *Escherichia coli* (2) and *Salmonella* spp. (2). Although most samples were within World Health Organisation limits for most parameters, none met coliform limits. pH ranged between 6.2 and 6.9. *Salmonella* prevalence was 2%. *Escherichia coli* and *Salmonella* spp. isolates were resistant to at least three antibiotics. The study showed inconsistent water quality across the city and contamination in alternative water sources.