

## Incidence of fecal contamination within a public drinking water supply in Ratta Amral, Rawalpindi

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### ABSTRACT

The aim of this study was to monitor microbial water quality and residual chlorine in drinking water supplies at the treatment plant and in the water distribution network of Ratta Amral, Rawalpindi, Pakistan. The drinking water quality in the distribution network was performed by collecting samples from water source, over head reservoir and residential taps and for analyzing chemical and microbial parameters. The samples were analyzed for physico-chemical indicators (total chlorine, free chlorine residual, turbidity, total dissolved solids and conductivity) and bacterial indicators (total and fecal coliforms). The average value of total chlorine at filtration plant was found to be ranging between 0.0 to 1.3 mg/l. Chlorine residue via distribution network available at consumer end was below detectable level at all sampling sites. The study is in progress to monitor the drinking water quality in the twin cities of Rawalpindi and Islamabad.

*Keywords:* Monitoring; Disinfection; Water quality; Distribution network; Chlorine residual; Filtration plant; Drinking water analysis

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