

ABSTRACT

The study was cross-sectional descriptive-analytic design. Forty four drinking water samples were collected from various water sources of 32 basic education schools of different level in Tamwe township were tested for the presence of coliform and *Esch. coli*.

Twenty six (59.1 percent) of samples were from primary schools, 14(31.8 percent) from high school and four(9.1 percent) from middle schools. Regarding source of drinking water, the main source was being commercial purified drinking water (54.5 percent) and others were Yangon city development committee (31.8 percent) and deep well (13.7 percent). Regarding water purification system, 50 percent of water samples from high school used purifier system, and 75 percent of samples from middle school used purifier system and 69.2 percent of samples from primary school utilized commercial purified drinking water system. Purifier system was used mostly for Yangon city development committee source. Regarding bacterial contamination result, primary schools showed highest percentage of no coliform result as well as least percentage of >16 Most Probable Number (M.P.N/100ml) result. Highest percentage of satisfactory result was from samples of primary school and highest percentage of unsatisfactory result was from samples of high school.

Regarding point of use container, 70.5 percent of samples were collected from plastic bottle container, 25 percent from steel container and 4.5 percent from plastic bucket. Highest contamination from plastic bucket, moderate contamination from steel container and least contamination from plastic bottle container could be identified. All *Esch.coli* positive water samples were collected from plastic bottle. Schools were used 24 different brands of commercial purified drinking water system. Overall *Esch.coli* positivity was 6.8 percent. *Esch.coli* was isolated mostly from water samples of commercial purified source/system. Coliform negativity was 13.6 percent.

Bacterial contamination status of school drinking water was highly unsatisfactory (70.5 percent of all samples). Monthly or at least 3 monthly filter change had found to be higher satisfactory results.