ABSTRACT

This study was conducted to assess the drinking quality for school students after knowledge of sanitary conditions of water supply were given to the schools' administrators or the headmasters. The study aimed to improve the quality of drinking water served for school students and to raise the awareness of the school's authorities in protecting their students from waterborne illness. The drinking water quality was analyzed for bacterial contamination and the results were evaluated to determine relationship between the contamination and the sanitary conditions of water supply in schools. The overall result revealed that bacterial contamination in drinking water samples decreased after providing knowledge of sanitation to the schools' officials. Only one water posttest sample taken from a governmental school contained the waterborne pathogens. The statistical test showed that bacterial contamination in drinking water samples before and after intervention was significantly different ($p < 0.05$) and the water samples taken from governmental schools and private schools showed significantly different ($p < 0.05$) as well. Average concentration of Coliforms, which is a sanitary indicator, in drinking water samples taken from most targeted schools did not exceed the standard regulation prescribed by Ministry of Public Health. In addition, it was found that poor quality drinking water samples from all schools are dispensed from faucets of water cooler tanks and multiple faucets basins, all of which were located in dirty surrounding areas. Based on the results, the schools' administrators offering contaminated drinking water were requested to improve sanitary conditions of the positive water dispensing points to minimize the contamination, especially when the waterborne pathogens existed.