

ABSTRACT

Microbiological contamination of drinking water is a major public health problem in developing countries like Pakistan. Aim of the present study was to analyze the microbiological quality of drinking water in Lahore. A total of 135 drinking water samples including samples from water supplies with filtration (n=45), samples of water supplies without filtration (n=45) from 09 towns of Lahore and bottled drinking water samples (n=45) of different brands were collected from local market. To determine the microbiological quality, all samples were subjected to total plate count, total coliform, E.coli, and fecal streptococci count and Salmonella detection. Total plate count of samples from water supplies was significantly higher as compared to bottled drinking water samples. Drinking water from water supplies with filtration was found to be contaminated with total coliform 51%, E.coli 51% and water supplies without filtration was found to be contaminated with total coliform 84.5%, E.coli 84.5%, fecal streptococci 15.5%, and Salmonella 11.1%. Bottled drinking water samples were found to be contaminated with total coliform 8.8% and E.coli 8.8%. The microbiological quality of drinking water from water supplies and condition of water distribution system of Lahore was not therefore satisfactory. The presence of microbial pathogens in water supplies as well as in bottled water samples insinuates for strict monitoring of drinking water by regulatory authority to avoid any health hazard.