

Influencing factors for household water quality improvement in reducing diarrhoea in resource-limited areas

Abstract

Background and objectives: Water and sanitation are major public health issues exacerbated by rapid population growth, limited resources, disasters and environmental depletion. This study was undertaken to study the influencing factors for household water quality improvement for reducing diarrhoea in resource-limited areas. Materials and methods: Data were collected from articles and reviews from relevant randomized controlled trials, new articles, systematic reviews and meta-analyses from PubMed, World Health Organization (WHO), United Nations Children's Fund (UNICEF) and WELL Resource Centre For Water, Sanitation And Environmental Health. Discussion: Water quality on diarrhoea prevention could be affected by contamination during storage, collection and even at point-of-use. Point-of-use water treatment (household-based) is the most cost-effective method for prevention of diarrhoea. Chemical disinfection, filtration, thermal disinfection, solar disinfection and flocculation and disinfection are five most promising household water treatment methodologies for resource-limited areas. Conclusion: Promoting household water treatment is most essential for preventing diarrhoeal disease. In addition, the water should be of acceptable taste, appropriate for emergency and non-emergency use.