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Introduction

Clean water is essential to human life; safe quality of water supplied to communities is an important consideration in the protection of human health and well-being. Without water, life cannot be sustained beyond a few days and the lack of access to a safe water supplies leads to the spread of water-borne diseases. The microbiological quality of drinking-water has been implicated in the spread of important infections and parasitic diseases such as cholera, typhoid, dysentery, hepatitis, giardiasis, guinea worm and schistosomiasis [1,2]. Kuitcha et al. and Ndjama et al. reported that the majority of health problems which African countries face are water related: malaria, typhoid, bilharziasis, diarrhoeal diseases, cholera, and dysenteries.

A microbiological aspect is one of the specific standards to provide a basis for judging quality of water. Water may act positively in the control of some diseases through its use in hygiene, and may act a source or vector for others where contact with water is required for disease transmission or where agents of disease or insect vectors require water in which to complete their life cycle [3]. Ideally, drinking water should not contain any microorganisms known to be pathogenic. It should also be free from bacteria indicative of pollution with excreta.

The primary bacterial indicator recommended for this purpose is the coliform group of organisms as a whole. Supplementary indicator organisms, such as faecal streptococci and sulfite–reducing clostridia, may sometimes be useful in determining the origin of faecal pollution

High increased faecal coliform and total bacteria counts were detected among the samples collected from transportation and storing vessels (Tables 1 and 2). Water contamination between source and point-of-use indicate a decline after collection, although there is significant variation between settings (Tables 1 and 2). This contamination may lessen the health benefits of water source quality. The results imply that samples taken from storage vessels may provide a better reflection of the quality of water consumed than source samples. If water testing is performed only at sources in such settings, then results of monitoring may not reflect the quality of water actually consumed in the home.

Drinking water from sources, transportation methods and storing vessels contaminated with *E. coli* and/or with high total bacterial count has been shown to contribute to an increased risk prevalence of the water-borne diseases (Table 3). These results are in agreement with [5] evidence from a study in Philadelphia, Pennsylvania, that suggested that drinking water regulated by federal water quality standards contributed to the endemic incidence of gastrointestinal illness in the persons aged 65 years and older. Poor water quality and bad sanitation are deadly; some 5 million deaths a year are caused by polluted drinking water [4,6].

Conclusion

High contamination of the drinking water with and total count of bacteria was detected among the samples collected from different types of the drinking water sources, transporting vessels, storage containers and drawing of water.

The contaminated sources still used for water supply in the locality due to absence of system for drinking water monitoring and safety in the locality.

Microbiological contamination of water between source and point-of-use is widespread and significant associated with open container i.e., storing barrels and buckets.

Post-collection contamination during drinking water transportation and storing if not considered, it may compromise the policies that aim to improve water quality through source improvement only.

It has been observed that ill-health and quality of drinking water are closely interlinked and mutually dependent, in the locality.

Recommendations

Based on the results, discussion and conclusion of this study the following recommendations are proposed:

- Establishing active partnerships between communities and water's providers and other sectors.

- Organizations of the community to have appropriate systems and processes to support monitoring of drinking water handling by competent well trained health professionals.

- Establishment of monitoring system, and activates the regulations responsible for health inspection and community responsibility, towards