FOLIA MEDICA INDONESIANA
Vol. 41 No. 1 January - March 2005

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Published by :
AIRLANGGA UNIVERSITY SCHOOL OF MEDICINE
Accredited no. 39/DIKTI/Kep/2004

Folia Medica
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Quality of Refilled Drinking Water in Surabaya City

Abstract

Since municipal drinking water is frequently in unsafe condition and the price of mineralized water is getting more expensive, development of refilled drinking water is welcomed among middle to lower income society of Surabaya city. Therefore the objective of this study was to study whether quality of refilled drinking water in Surabaya city meet standard criteria of drinking water quality according to Decree of Health Minister of Republic of Indonesia (Kepmenkes) No. 907/Menkes/SK/VII/2002. This study was designed as a field observational study conducted crosssectional among refilled drinking water stands (depots) in Surabaya city with descriptive analysis. Data gathering was carried out in the month of July 2004. Sample size was determined purposively by taking 1 refilled drinking water sample from the stand (depot) of each district in Surabaya city. Therefore the sample size was 31 samples of refilled drinking water. Samples were analyzed at Laboratory of Balai Teknik Kesehatan Lingkungan (BTKL) Surabaya for physical quality i.e. turbidity, chemical quality i.e. acidity (pH) and total dissolved solids (TDS), and bacteriological quality i.e. total Coliform bacteria. The results showed that all 31 samples of refilled drinking water met standard criteria of The Kepmenkes for turbidity and total dissolved solids (TDS) parameters. However, 1 (3,23 %) out of 31 samples did not meet standard criteria of The Kepmenkes for acidity level (pH) parameter; and 7 (22,58 %) out of those samples did not meet standard criteria of The Kepmenkes for total Coliform bacteria parameter. It is concluded that refilled drinking water in Surabaya has not met standard criteria of drinking water as stated in The Kepmenkes since 22,58 % of samples are contaminated by Coliform bacteria. It is recommended to consumers to boil refilled drinking water before consumed. Surabaya’s Department of Health has to pay more attention and to increase activity in refilled drinking water monitoring to prevent public from suffering water borne diseases. It is suggested to consumers, to be safe, to boil this water before drinking to avoid health problem.

Keyword : refilled, drinking, water, quality, Kepmenkes, ,

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