

# **RELATIONSHIP OF DRINKING WATER DEPOT SANITATION WITH THE QUALITY OF DRINKING WATER MICROBIOLOGY IN THE WORKING AREA OF KALIRUNGKUT HEALTH CENTER SURABAYA CITY**

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## **ABSTRACT**

The owner of DAM was obliged to ensure that the drinking water it produces meets the drinking water quality requirements in accordance with the regulations and meets the sanitation hygiene requirements in drinking water management. The research objective was to determine the relationship between drinking water depot sanitation and the microbiological quality of drinking water in the working area of Kalirungkut Health Center, Surabaya City.

This research was an observational analytic study with a cross-sectional approach. Data collection was obtained through observation, interviews and secondary data collection. The population of this study were 16 drinking water depots in the working area of Kalirungkut Health Center, Surabaya City, with a total sample size of 16 drinking water depots. The data obtained were then analyzed by Chi Square Test.

The results showed that the sanitary conditions of drinking water depots met the requirements of 6 (37.5%) depots and 10 (62.5%) depots did not meet the requirements. The microbiological quality of drinking water met the requirements of 7 (43.75%) depots and 9 (56.25%) depots did not meet the requirements. Chi square test results obtained Fisher's test value 0.001, which is p value <0.05, which means that Ho was rejected and Ha was accepted, there was a relationship between drinking water depot sanitation and the microbiological quality of drinking water.

It was suggested that there was an obligation for DAM owners to fulfill their DAM sanitation and that drinking water from DAM was cooked before consumption.

**Keywords:** Drinking Water Depot (DAM), Microbiology.

# HUBUNGAN SANITASI DEPOT AIR MINUM DENGAN KUALITAS MIKROBIOLOGI AIR MINUM DI WILAYAH KERJA PUSKESMAS KALIRUNGKUT KOTA SURABAYA

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## ABSTRAK

Pemilik DAM wajib menjamin air minum yang dihasilkannya memenuhi persyaratan kualitas air minum sesuai dengan peraturan dan memenuhi persyaratan *higiene sanitasi* dalam pengelolaan air minum. Tujuan penelitian untuk mengetahui hubungan sanitasi depot air minum dengan kualitas mikrobiologis air minum di wilayah kerja Puskesmas Kalirungkut Kota Surabaya.

Penelitian ini merupakan penelitian analitik *observasional* dengan pendekatan *cross-sectional*. Pengumpulan data didapatkan melalui observasi, wawancara dan pengumpulan data sekunder. Populasi penelitian ini adalah depot air minum diwilayah kerja Puskesmas Kalirungkut Kota Surabaya sebanyak 16 depot dengan jumlah sampel sebanyak 16 depot. Data yang diperoleh selanjutnya dianalisis dengan *Chi Square Test*.

Hasil penelitian menunjukkan kondisi sanitasi depot air minum memenuhi persyaratan sebanyak 6 (37,5%) depot dan tidak memenuhi persyaratan sebanyak 10 (62,5%) depot. Kualitas mikrobiologis air minum memenuhi persyaratan sebanyak 7 (43,75%) depot dan tidak memenuhi persyaratan sebanyak 9 (56,25%) depot. Hasil uji *chi square* didapatkan nilai *Fisher's test* 0,001 yaitu *p value*  $\leq$  0,05 yang berarti *Ho* ditolak dan *Ha* diterima yaitu ada hubungan sanitasi depot air minum dengan kualitas mikrobiologis air minum.

Disarankan ada kewajiban bagi pemilik DAM untuk memenuhi sanitasi DAM yang dimilikinya dan air minum dari DAM sebelum dikonsumsi dimasak terlebih dahulu.

Kata Kunci : Depot Air Minum (DAM), Mikrobiologis.