

KAJIAN KUALITAS AIR MINUM ISI ULANG PADA DEPOT AIR MINUM ISI ULANG (DAMIU) DI KEBUMEN 2005

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Keamanan air minum ditentukan berdasarkan syarat kualitas fisik, kimia, bakteriologi dan radioaktif. Di Kabupaten Kebumen saat ini ada depot air minum isi ulang. Hasil analisis laboratorium IPB akhir tahun 2002 dari 120 sampel air minum isi ulang di 10 kota besar diketahui 16% terkontaminasi bakteri coliform. Melihat kenyataan tersebut peneliti bertujuan mendeskripsikan sumber air baku, mendeskripsikan kondisi pengolahan air minum, mengukur higiene dan sanitasi depot, mengukur kualitas air minum secara fisik, kimia dan bakteriologi, menganalisis hubungan higiene sanitasi depot dengan kualitas air minum. Jenis penelitian adalah observasional dengan pendekatan cross sectional. Populasi penelitian adalah seluruh depot air minum isi ulang di Kabupaten Kebumen. Jumlah Sampel 13 sampel. Pemeriksaan kualitas air meliputi fisik (bau, rasa, warna, suhu, dan kekeruhan), kimia (pH, besi, mangan) dan bakteriologi (total bakteri coliform dan E. coli). Data yang diperoleh disajikan dalam bentuk tabel dan narasi dari variabel yang diteliti, analisis menggunakan uji chi-square. Dari hasil survey air baku yang digunakan untuk air minum pada depot air minum isi ulang di Kabupaten Kebumen bersumber dari mata air 9 depot dan sumur dalam 4 depot, alat angkut yang dipakai mobil tangki dan bak penampung air baku 1 depot menggunakan Aluminium, 9 depot menggunakan plastik, dan 3 depot menggunakan stainless steel. Proses penyaringan air minum menggunakan saringan karbon aktif 8 depot, saringan pasir 5 depot. Sterilisasi air minum menggunakan ozon 1 depot, ultra violet 12 depot. Hasil inspeksi sanitasi 12 depot tingkat resiko pencemarannya rendah dan 1 depot tingkat pencemaran tinggi. Hasil pemeriksaan fisik air minum (bau, rasa, warna, suhu dan kekeruhan) memenuhi syarat Kepmenkes RI No.907/Menkes/SK/VII/2002. Pemeriksaan kimia air minum (pH, besi, mangan) pada depot I, X, XI, XII, XIII tidak memenuhi syarat Kepmenkes RI No.907/Menkes/SK/VII/2002 juga total bakteri coliform pada depot IX dan XIII. Pemeriksaan E. coli memenuhi syarat Kepmenkes RI No.907/Menkes/SK/VII/2002. tidak ada hubungan antara higiene sanitasi depot dengan kualitas air minum.

Kata Kunci: Air minum isi ulang, Kualitas air

*THE STUDY OF QUALITY DRINKING WATER REFILL AT DRINKING WATER
DEPOT (DAMIU) IN KEBUMEN 2005*

The safety of drinking water is determined by pursuant of physical, chemical, microbiological and radioactive quality. At present in Kebumen there are 13 drinking water refill depots. The analysis result of IPB laboratory at the end 2002, from 120 sample of drinking water refill taken in metropolis known that 16% of drinking water is contaminated by coliform bacterium. Based the fact the research aims to describe the standard of water source, describe the condition of drinking water refill process, measure the hygiene and sanitation, measure the quality of drinking water physically, chemical and bacteriologist, analyse the relationship between the hygiene and sanitation of depots and the quality of drinking water. The type of research is observational with cross sectional approach. The population of research are all depot of drinking water refill in Kebumen, those are 13 depot, the sample is total population. The water quality examination include physical (smell, taste, colour, temperature and muddiness), chemical (pH, iron, and mangan) and bacteriological (Coliform bacterium and E. Coli). The result data is presented in table form and narration of variables examined, analysis using chi square test. The survey result of the standard water which is used to produce drinking water at drinking water depots in Kebumen is sourced from wellspring 9 depots and deep well 4 depots. The screening process of drinking water use the filter of active carbon 8 depots, the filter of sand 5 depots. Drinking water sterilization use ozon 1 depots ultra violet 12 depots. From the sanitation inspectional result of all depot prove that the degree of the population is low. The physical examination of drinking water (smell, taste, colour, temperature, and muddiness) fulfills the standard of Kepmenkes RI No. 907/Menkes/SK/VII/2002 for chemical examination of drinking water (pH, iron, and mangan) but in depot I, X, XI, XII, XIII, does't fulfill the standard Kepmenkes RI No. 907/Menkes/SK/VII/2002 and also a number of coliform bacterium which is in depot IX and XIII, and for E. coli examination fulfills the standard Kepmenkes RI No. 907/Menkes/SK/VII/2002. There is no relationship between the hygiene sanitations which is done by depot and the drinking water quality.

Keyword : water quality, Drinking water refill