

ABSTRAK

Nama : Jihan Faadhilah (1102018273)
Program Studi : Kedokteran
Judul : Identifikasi Bakteri Coliform Pada Depot Air Minum Isi Ulang Di Kecamatan Cempaka Putih dan Tinjaunnya Menurut Pandangan Islam

Latar Belakang : Berdasarkan data dari Badan Pusat Statistik (BPS) DKI Jakarta tahun 2018, air kemasan menjadi sumber air minum dominan di semua wilayah di DKI Jakarta dan di Jakarta Pusat sendiri tercatat 80% masyarakatnya menggunakan air minum kemasan. Tingginya harga air minum kemasan membuat masyarakat mencari alternatif salah satunya dari Depot Air Minum Isi Ulang karena harganya jauh lebih murah. Menurut Peraturan Menteri Kesehatan Nomor No 492 Tahun 2010 air minum tidak boleh mengandung bakteri Coliform dan *Escherichia coli* dalam 100 mL air. Allah SWT memerintahkan kepada manusia agar mengkonsumsi makanan dan minuman yang halal dan thoyyib seperti yang sudah diterangkan di dalam *Al-Qur'an Qs Al Baqarah (2) : 168*.

Metode : Penelitian yang dilakukan adalah penelitian deskriptif. Populasi penelitian ini adalah semua depot air minum isi ulang di Kecamatan Cempaka Putih. Diambil 3 sampel dengan cara *total sampling*. Analisis data dilakukan dengan wawancara, observasi, uji TPC, uji MPN, dan uji biokimia.

Hasil : Dua dari tiga depot terdapat bakteri coliform yaitu bakteri *Eschericia* dan bakteri *Enterobacter* yang merupakan bakteri coliform *fecal* dan *non fecal*.

Simpulan : . Kondisi *hygiene* dan sanitasi pada depot dalam keadaan yang cukup namun harus ada yang dibenahi karena ada hubungan erat antara kebersihan dengan kontaminasi bakteri coliform dalam air minum. Adanya bakteri coliform menunjukkan air belum memenuhi persyaratan kualitas air minum namun jumlah bakteri tidak melebihi batas ambang baku mutu yang dipersyaratkan sehingga masih aman untuk diminum. Menurut pandangan Islam, ketergantungan manusia dengan air sangat erat. Allah SWT menurunkan air sebagai salah satu bentuk karunia-Nya. Umat Muslim diperintahkan untuk mengkonsumsi minuman yang halal dan thayyib sehingga apabila dengan meminum air tersebut kita menjadi sakit sebaiknya dihindari dan mencari alternatif air yang lain.

Kata Kunci : *Bakteri Coliform, Air Minum Isi Ulang, Uji TPC, Uji MPN, Uji Biokimia.*

ABSTRACT

Name : Jihan Faadhilah (1102018273)
Study Program : Medicine
Title : Identification of Coliform Bacteria in Refillable Drinking Water Depots in Cempaka Putih Subdistrict and Their Review According to Islamic View.

Background : Based on data from the DKI Jakarta Central Statistics Agency (BPS) in 2018, bottled water is the dominant source of drinking water in all areas in DKI Jakarta and in Central Jakarta itself, 80% of the people use bottled drinking water. The high price of bottled water makes people look for alternatives, one of which is from the Refill Drinking Water Depot because the price is much cheaper. According to the Regulation of the Minister of Health No. 492 of 2010 drinking water may not contain Coliform and *Escherichia coli* bacteria in 100 mL of water. Allah SWT commands humans to consume halal and thoyyib food and drinks as explained in the Qur'an Qs Al Baqarah (2): 168.

Research Objective : This research is descriptive research. The population of this study were all refill drinking water depots in Cempaka Putih District. Three samples were taken by total sampling. Data analysis was done by interview, observation, TPC test, MPN test, and biochemical test.

Merhods : Two of the three depots contained coliform bacteria, namely *Eschericia* bacteria and *Enterobacter* bacteria, which are fecal and non-fecal coliform bacteria.

Research Results : Two of the three depots contained coliform bacteria, namely *Eschericia* bacteria and *Enterobacter* bacteria, which are fecal and non-fecal coliform bacteria.

Conclusion : Hygiene and sanitation conditions at the depot are in sufficient condition but there must be improvements because there is a close relationship between cleanliness and contamination with coliform bacteria in drinking water. The presence of coliform bacteria indicates that the water does not meet the drinking water quality requirements, but the number of bacteria does not exceed the required quality standard threshold so that it is still safe to drink. According to the Islamic view, human dependence on water is very close. Allah SWT sent down water as a form of His gift. Muslims are ordered to consume halal and thayyib drinks so that if by drinking this water we become sick, we should avoid it and look for other water alternatives.

Keywords : Coliform Bacteria. Refill Drinking Water, TPC Test, MPN Test, Biochemical Test.