

FAKTOR-FAKTOR YANG BERHUBUNGAN DENGAN KUALITAS MIKROBIOLOGI AIR MINUM RUMAH TANGGA DI KOTA BOGOR (ANALISIS DATA SURVEILANS KAMRT TAHUN 2025)

Vyrza Aristya Safitriani

Abstrak

Kota Bogor memiliki akses air minum layak 93,93%, namun akses air minum aman masih sebesar 69,57%, menunjukkan masih adanya potensi kontaminasi mikrobiologi pada air minum rumah tangga. Penelitian ini bertujuan untuk menganalisis faktor-faktor yang berhubungan dengan kualitas mikrobiologi air minum rumah tangga di Kota Bogor tahun 2025. Penelitian menggunakan desain potong lintang dengan data Surveilans Kualitas Air Minum Rumah Tangga (KAMRT) Tahun 2025 oleh Dinas Kesehatan Kota Bogor. Pengambilan sampel dilakukan menggunakan *two stage cluster sampling*, dilanjutkan dengan *simple random sampling* pada tingkat rumah tangga, dengan total 711 sampel. Analisis data dilakukan menggunakan uji *chi-square* pada analisis bivariat dan regresi logistik berganda pada analisis multivariat. Hasil penelitian menunjukkan bahwa 60,5% sampel air minum rumah tangga telah memenuhi standar kualitas mikrobiologi. Hasil analisis multivariat menunjukkan bahwa pendidikan kepala rumah tangga (aPOR = 1,560; CI95%: 1,144–2,128) dan jenis sarana air minum (aPOR = 19,917; CI95%: 2,601–152,499) berhubungan secara signifikan dengan kualitas mikrobiologi air minum rumah tangga. Jenis sarana air minum merupakan faktor yang paling dominan. Peningkatan akses terhadap sarana air minum yang terlindungi dan memenuhi standar keamanan, disertai penguatan edukasi kesehatan lingkungan kepada masyarakat, perlu menjadi prioritas dalam upaya meningkatkan kualitas mikrobiologi air minum rumah tangga.

Kata kunci: *Escherichia Coli*, Kualitas Air Minum, Mikrobiologi

FACTORS ASSOCIATED WITH THE MICROBIOLOGICAL QUALITY OF HOUSEHOLD DRINKING WATER IN BOGOR CITY (ANALYSIS OF SURVEILLANCE KAMRT 2025)

Vyrza Aristya Safitriani

Abstract

Bogor City has 93.93% access to basic drinking water, while safely managed drinking water access remains at 69.57%, indicating potential microbiological contamination. This study aimed to analyze factors associated with the microbiological quality of household drinking water in Bogor City in 2025. A cross sectional study was conducted using data from the 2025 Household Drinking Water Quality Surveillance implemented by the Bogor City Health Department. Samples were selected using two stage cluster sampling, followed by simple random sampling of households, with 711 households included in the analysis. Bivariate analysis was performed using the chi-square test, and multivariable analysis was conducted using multiple logistic regression. 60.5% of household drinking water samples met the microbiological quality standards. Multivariable analysis showed that the household head's educational level (aPOR = 1,560; CI95%: 1,144–2,128) and the type of drinking water source (aPOR = 19.917; 95% CI: 2.601–152.499) were significantly associated with the microbiological quality of household drinking water. The type of drinking water source was the strongest factor associated with microbiological water quality. Expanding access to protected drinking water sources with safety standards, together with strengthening environmental health education, should be prioritized to improve the microbiological quality of household drinking water.

Keyword: *Escheria Coli, Drinking Water Quality, Microbiological*