

Abstrak

EVALUASI KUALITAS FISIK, KIMIA DAN MIKROBIOLOGI AIR MINUM DAN AIR BERSIH RUMAH TANGGA DI WILAYAH KERJA PUSKESMAS SEBOROKRAPYAK KABUPATEN PURWOREJO

Aurizka Mileniawati, Agnes Fitria Widiyanto, M. Addin Rizaldi

Latar Belakang: Mengetahui kualitas air minum dan air bersih rumah tangga melalui kegiatan SKAMRT menjadi salah satu langkah untuk mencapai pilar ketiga STBM yaitu Pengelolaan Air Minum dan Makanan Rumah Tangga. Penelitian ini bertujuan mengetahui kondisi kualitas fisik, kimia, dan mikrobiologi air minum serta air bersih rumah tangga di wilayah kerja Puskesmas Seborokrapyak, Kabupaten Purworejo.

Metodologi: Penelitian ini menggunakan desain deskriptif kuantitatif dengan data sekunder hasil kegiatan SKAMRT Puskesmas Seborokrapyak Tahun 2024. Teknik pengambilan sampel penelitian adalah *purposive sampling*. Besaran sampel yang diambil adalah sebanyak 15 sampel air minum dan 15 sampel air. Lokasi pengambilan sampel di tiga desa yaitu Desa Seborokrapyak, Desa Triwarno dan Desa Kliwonan. Parameter yang digunakan adalah parameter fisik (suhu, warna, bau, Total Dissolved Solids/TDS), kimia (pH, Fe, Mn, Cr, Al, F, Nitrat dan Nitrit), dan mikrobiologi (*Escherichia coli*, *total coliform*).

Hasil Penelitian: Hasil menunjukkan sebagian sampel tidak memenuhi syarat fisik terutama pada TDS dan suhu. Seluruh sampel tidak memenuhi syarat kimia akibat kadar Cr melebihi ambang batas; sebagian juga memiliki pH rendah dan kadar Fe serta Mn tinggi. Mayoritas sampel positif mengandung *E. coli* dan/atau *total coliform*.

Kesimpulan: Kualitas air minum dan air bersih rumah tangga di wilayah ini belum memenuhi standar, sehingga diperlukan investigasi sumber pencemar, pemantauan rutin, perbaikan infrastruktur, dan edukasi masyarakat terkait pengelolaan air minum aman.

Kata kunci: kualitas air minum, kualitas air bersih, fisik, kimia, mikrobiologi, SKAMRT

Abstract

EVALUATION OF THE PHYSICAL, CHEMICAL, AND MICROBIOLOGICAL QUALITY OF DRINKING WATER AND HOUSEHOLD CLEAN WATER IN THE WORKING AREA OF SEBOROKRAPYAK COMMUNITY HEALTH CENTER PURWOREJO REGENCY

Aurizka Mileniawati, Agnes Fitria Widiyanto, M. Addin Rizaldi

Background: Determining the quality of drinking water and household clean water through SKAMRT activities is one step towards achieving the third pillar of STBM, namely Household Drinking Water and Food Management. This study aims to determine the physical, chemical, and microbiological quality of drinking water and household clean water in the working area of the Seborokrapyak Community Health Center, Purworejo Regency.

Methods: This study used a quantitative descriptive design with secondary data from the SKAMRT activities of the Seborokrapyak Community Health Center in 2024. The sampling technique used purposive sampling. The sample size taken was 15 drinking water samples and 15 water samples. The sampling locations were three villages: Seborokrapyak, Triwarno, and Kliwonan. The parameters used were physical (temperature, color, odor, Total Dissolved Solids/TDS), chemical (pH, Fe, Mn, Cr, Al, F, Nitrate, and Nitrite), and microbiological (Escherichia coli, total coliform).

Results: Results showed that some samples did not meet physical requirements, particularly for TDS and temperature. All samples did not meet chemical requirements due to Cr levels exceeding the threshold; some also had low pH and high Fe and Mn levels. The majority of samples tested positive for E. coli and/or total coliform.

Conclusion: The quality of drinking water and household clean water in this area does not meet standards, necessitating investigation of pollution sources, routine monitoring, infrastructure improvements, and public education regarding safe drinking water management.

Keywords: drinking water quality, clean water quality, physical, chemical, microbiological, SKAMRT