

## ABSTRAK

**Ershad. 2013.** Pengaruh Kualitas Air Sumur Gali Terhadap Kejadian Diare Di Desa Boludawa Kecamatan Suwawa Kabupaten Bone Bolango Tahun 2013. Skripsi. Program Studi Kesehatan Masyarakat, Fakultas Ilmu-Ilmu Kesehatan dan Keolahragaan, Universitas Negeri Gorontalo. Pembimbing I Dra. Hj. Rani Hiola, M.Kes dan Pembimbing II Ramly Abudi, S.Psi, M.Kes.

Air yang bersih harus memenuhi 3 (tiga) kriteria parameter, yaitu parameter fisik, parameter kimia dan parameter biologi. Air sumur gali banyak digunakan oleh masyarakat, terutama masyarakat pedesaan karena selain proses pembuatannya yang mudah dan dapat dilakukan masyarakat itu sendiri dengan peralatan sederhana dan biaya yang murah.

Jenis penelitian yang digunakan adalah *survay analitik* dengan rancangan *cross sectional study*. Populasi dalam penelitian ini adalah seluruh sumur gali di desa Boludawa kecamatan Suwawa yaitu 204 sumur gali. Sedangkan jumlah sampel sebanyak 50 sumur gali yang ditentukan dengan tehnik *Cluster random sampling*. Analisis data menggunakan uji *chi-square* dan uji *fisher's exact test* untuk mengetahui pengaruh kualitas air sumur gali terhadap kejadian diare.

Hasil Penelitian menunjukkan untuk pengaruh kualitas fisik berdasarkan warna air didapatkan nilai  $0,004 < 0,05$  ( $H_0$  ditolak). untuk pengaruh kualitas fisik berdasarkan rasa air didapatkan nilai  $0,111 > 0,05$  ( $H_0$  diterima). untuk pengaruh kualitas fisik berdasarkan bau air didapatkan nilai  $0,111 > 0,05$  ( $H_0$  diterima). untuk pengaruh kualitas fisik berdasarkan kekeruhan air didapatkan nilai  $0,004 < 0,05$  ( $H_0$  ditolak). untuk pengaruh kualitas fisik berdasarkan TDS dalam air didapatkan nilai  $0,111 > 0,05$  ( $H_0$  diterima). Untuk pengaruh kualitas kimia berdasarkan pH air didapatkan nilai  $0,010 < 0,05$  ( $H_0$  ditolak). untuk pengaruh kualitas biologi berdasarkan E.coli dalam air didapatkan nilai  $0,001 < 0,05$  ( $H_0$  ditolak). Dengan melihat hasil penelitian tersebut diharapkan masyarakat lebih memperhatikan higiene sanitasi serta menggunakan penyaringan air agar dapat meningkatkan kualitas air sumur gali.

**Kata Kunci : Kualitas Air, Sumur Gali, Diare**

## ABSTRACT

**Ershad.** 2013. The Effect of Water Well Quality on Diarrheal Diseases at Village of Boludawa, sub-district of Suwawa, District of Bone Bolango. Skripsi. Study Program of Public Health. Faculty of Health and Sports Sciences. Universitas Negeri Gorontalo. Principal Supervisor was Dra. Hj. Rani Hiola, M.Kes, and co-supervisor was Ramly Abudi, S.Psi, M.Kes.

Clean water should meet three criteria parameters, namely the physical parameters, Parameter Chemical, Biological Parameters. Many communities, especially at rural communities, use well water, because in addition to the manufacturing process is easy and can be done by the community itself with simple equipment and low cost.

This research was the analytic survey with the cross sectional study. The population in this research was all the well water at village of Boludawa, sub-district of Suwawa, District of Bone Bolango, about 204 of the well water. While, the sample of this research was 50 of the well water. It was determined by cluster random sampling test. The analysis of the data used Chi-Square test and Fisher's exact test, to know the effect of the well water quality on the diarrheal diseases.

The result of the research showed the effect of physical quality, based on the color of the water,  $p\ 0,004 < 0,05$  ( $H_0$  is rejected), the effect of physical quality, which based on the taste of the water,  $p\ 0,111 > 0,05$  ( $H_0$  is accepted), the effect of physical quality, which based on the smell of the water  $p\ 0,111 > 0,05$  ( $H_0$  is accepted), and the effect of physical quality, which based on the turbidity of the water  $p\ 0,004 < 0,05$  ( $H_0$  is rejected), the effect of physical quality, which based on Total Dissolved Solid (TDS) of the water  $p\ 0,111 > 0,05$  ( $H_0$  is accepted), the effect of chemical quality, which based on the pH of the water  $p\ 0,004 < 0,05$  ( $H_0$  is rejected), the effect of biological quality, which based on the E.coli in the water  $p\ 0,001 < 0,05$  ( $H_0$  is rejected). The result of this research hoped that the community would pay more attention on the hygiene sanitation, and use the water filtration. So, it can increase the quality of well water increase.

**Keywords: Water Quality, Well Water, diarrheal**