

**IDENTIFIKASI BAKTERI PADA AIR DI WATERLINE (SALURAN AIR)  
DENTAL UNIT RUMAH SAKIT GIGI DAN MULUT (RSGM)  
FAKULTAS KEDOKTERAN GIGI UNIVERSITAS ANDALAS**

**OLEH :**

**SITI RAHMAH**



**Dosen Pembimbing :**

1. Prof.dr.Nur Indrawati Lipoeto,Sp.GK,M.Sc,Ph.D
2. drg.Harfindo Nismal,Sp.BM

**FAKULTAS KEDOKTERAN GIGI  
UNIVERSITAS ANDALAS  
PADANG**

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**IDENTIFIKASI BAKTERI PADA AIR DI WATERLINE (SALURAN AIR)  
DENTAL UNIT RUMAH SAKIT GIGI DAN MULUT (RSGM) FAKULTAS  
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**Siti Rahmah**

**Pembimbing I : Prof.dr.Nur Indrawati Lipoeto,Sp.GK,M.Sc,Ph.D**

**Pembimbing II : drg.Harfindo Nismal,Sp.BM**

**ABSTRAK**

Kontrol infeksi adalah suatu upaya pencegahan penyebaran mikroorganisme, baik dari pasien ke pasien lainnya, pasien ke operator, operator ke pasien, operator ke lingkungan dan lingkungan ke pasien. Kontrol infeksi yang efektif adalah salah satu indikator penting menunjukkan tercapainya pelaksanaan pelayanan kesehatan gigi dan mulut yang baik. Penelitian ini bertujuan untuk menghitung jumlah koloni dan mengidentifikasi bakteri pada air yang melewati *Dental Unit Waterline* (DUWL) di *dental unit* Rumah Sakit Gigi dan Mulut Fakultas Kedokteran Gigi Universitas Andalas.

Penelitian ini dilakukan dengan cara menampung air dari *high-speed handpiece*, *water syringe* dan *ultrasonic scaler*. Berdasarkan rumus penelitian Federer (2007) diperoleh sebanyak 9 sampel dalam satu kelompok alat. Sehingga sampel seluruhnya berjumlah 27. Pengambilan sampel didapat menggunakan metode acak sederhana. Penghitungan koloni dan identifikasi bakteri dilakukan di Laboratorium Kesehatan Daerah Sumatera Barat dengan menggunakan media Agra Darah.

Hasil penelitian menunjukkan bahwa terdapat 22 sampel air terkontaminasi oleh bakteri, 4 diantaranya tidak sesuai dengan standar ADA. Kontaminasi bakteri kokus Gram positif sebanyak 8 sampel dan basil Gram negatif sebanyak 16 sampel. Bakteri *Klebsiella pneumoniae* ditemukan pada 2 sampel air yang melalui *water syringe*.

Jadi, *dental unit waterline* (saluran air) pada *dental unit* berpotensi sebagai sumber mikroorganisme, khususnya bakteri.

**Kata Kunci:** Kontrol infeksi, kontaminasi bakteri, *dental unit waterline*, *high-speed handpiece*, *water syringe* dan *ultrasonic scaler*

**BACTERIA IDENTIFICATION IN THE WATER AT WATERLINE OF  
DENTAL UNIT IN DENTAL HOSPITAL FACULTY OF DENTISTRY  
ANDALAS UNIVERSITY**

**Siti Rahmah**

**Pembimbing I : Prof. dr. Nur Indrawati Lipoeto, Sp.GK, M.Sc, Ph.D**

**Pembimbing II : drg. Harfindo Nismal, Sp.BM**

***ABSTRACT***

Infection control was an effort to prevent the spread of microorganisms, both from patient to another, the patient to the operator, the operator to patients, operators and the environment to the environment to the patient. Effective infection control was one of the important indicators show the achievement of the implementation of oral health care was good. This study aimed to quantified the number of colonies and identified the bacteria in the water that pass through the *Dental Unit Waterline* (DUWL) in the dental unit Dental Hospital Faculty of Dentistry, Andalas University.

The research did with patch the water from a *high-speed handpiece*, *water syringe* and *ultrasonic scaler*. Based on the study formula Federer (2007) gained as much as 9 samples in one group of tools. Thus, the samples totaling 27. Samples were obtained using simple random method. Colony counting and identifiicated of bacteria carried in Health Laboratory the West Sumatra Regional using blood Agra media.

The results showed that there were 22 samples of water contaminated by bacteria, 4 of which were not in accordance with ADA standards. Gram-positive cocci bacteria contamination as much as 8 samples and Gram-negative bacilli as many as 16 samples. *Klebsiella pneumoniae* bacteria found in two samples of water through the water syringe.

Thus, the dental unit waterline on the dental unit has potential as a source of microorganisms, particularly bacteria.

**Key Words:** Control infection, bacterial contamination, *dental unit waterline*, *high-speed handpiece*, *water syringe* and *ultrasonic scaler*