

# **PENGARUH LAMA PENYIMPANAN TERHADAP *SHELF-LIFE SURGICAL INSTRUMENT RE-USE* DI CSSD-GBPT RSUD DR. SOETOMO**

Melysa Hansen, 2010

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## **ABSTRAK**

Penelitian ini dilakukan untuk mengetahui *shelf-life surgical instrument* yang disterilkan dengan menggunakan metode *steam sterilization* dan disimpan dengan pengemas *pouches* di ruang penyimpanan CSSD-GBPT RSUD Dr. Soetomo. Uji sterilitas dilakukan dengan metode inokulasi langsung menggunakan *cotton swab*. Sampel uji disimpan selama 15 hari dengan suhu 26-28°C dan kelembaban 77-78%. Sampel untuk uji sterilitas diambil pada hari ke 0, 3, 7, 9, 12 dan 15. Dilakukan replikasi sebanyak tiga kali untuk menjamin keakuratan hasil. Untuk menghindari positif palsu dilakukan uji sterilitas, uji fertilitas dan uji efektifitas LAFC. Sebagai kontrol terhadap pelaksanaan teknik aseptis dilakukan uji sterilitas *cotton swab* dan uji sterilitas cairan pembasah steril. Sebagai jaminan proses sterilisasi berjalan baik, dilakukan juga validasi proses sterilisasi dengan menggunakan indikator fisika, kimia, dan biologi. Media pertumbuhan yang digunakan pada penelitian ini adalah *Fluid Thyoglycollate Medium* dengan bakteri uji *Bacillus subtilis* dan *Soybean-casein Digest Medium* dengan jamur *Candida albicans*. Hasil penelitian menunjukkan *shelf-life surgical instrument* sampai hari ke-15 tetap steril.

**Kata Kunci** : *Surgical instrument, Shelf-life*, kondisi ruang penyimpanan

# **THE EFFECT OF DURATION STORAGE ON SURGICAL INSTRUMENT RE-USE SHELF-LIFE AT GBPT-CSSD DR. SOETOMO**

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## **ABSTRACT**

This research was conducted to determine shelf-life of surgical instrument which sterilized with steam sterilization method and stored in packaging pouches in the storage room of CSSD-GBPT RSUD Dr. Soetomo. Sterility tests were performed using direct inoculation method with cotton swab. Test samples were stored for 15 days with a temperature of 26-28 ° C and humidity of 77-78%. These samples were taken at days 0, 3, 7, 9, 12 and 15. Replication performed three times to ensure the accuracy of the results. Sterility test, fertility test and LAFC effectivity test was done to avoid false positive. Sterility test of cotton swab and sterility test of sterile wetting liquid were done as a control of aseptic technique implementation. Sterility validation process with physics, chemistry and biology indicator were done as a assurance of sterilization process. Growth media used in this study were *Thyoglycollate Medium Fluid* with *Bacillus subtilis* tested bacteria and *Soybean-casein digest Medium* with *Candida albicans*. The research result showed that shelf-life of surgical instrument remain sterile until day-15

**Keywords:** Surgical instruments, Shelf-life, storage conditions