

# FAKTOR YANG BERHUBUNGAN DENGAN ANGKA KUMAN UDARA DI RUMAH SAKIT TNI AU SOEMITRO SURABAYA

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## ABSTRAK

Pemeriksaan mikrobiologi usap lantai di salah satu ruang rawat inap Rumah Sakit TNI AU Soemitro menemukan angka kuman lantai sejumlah 10 jumlah koloni. Hasil tersebut menunjukkan bahwa lantai di ruang rawat inap terindikasi menjadi pertumbuhan mikroorganisme. Tujuan dari penelitian ini adalah untuk mengetahui faktor yang berhubungan dengan angka kuman udara di Rumah Sakit TNI AU Soemitro Surabaya.

Penelitian ini termasuk jenis penelitian observasional analitik. Populasi dalam penelitian ini adalah seluruh ruangan di Rumah Sakit TNI AU Soemitro berjumlah 47 ruang dan diambil sampel sebanyak 38 ruangan yang terbagi menjadi 4 (empat) Zona Risiko (Risiko Rendah, Sedang, Tinggi dan Sangat Tinggi). Teknik pengambilan sampel dilakukan dengan *Stratified Random Sampling*. Analisis data menggunakan Uji *Pearson Product Moment*.

Hasil penelitian menunjukkan rata-rata angka kuman udara di Rumah Sakit TNI AU Soemitro sejumlah 52,8 CFU/m<sup>3</sup>. Suhu udara sejumlah 30,8°C dengan kelembaban 61,8%. Pencahayaan rata-rata sebesar 83,6 Lux. Hasil observasi penilaian sanitasi dan pemeliharaan ruang masing sejumlah 88,8% dan 77,7%. Uji *Pearson Product Moment* menyatakan ada hubungan suhu, kelembaban, pencahayaan, sanitasi ruang dan pemeliharaan ruang dengan angka kuman udara di Rumah Sakit TNI AU Soemitro

Rumah Sakit TNI AU Soemitro diharapkan dapat melakukan pemeliharaan dan sanitasi ruang yang tepat untuk mencegah adanya pertumbuhan kuman baik di udara maupun di permukaan benda-benda di ruangan. Pencahayaan, kelembaban dan suhu di dalam ruangan perlu diukur secara berkala (3 bulan sekali) untuk mengetahui kesesuaian dengan baku mutu sehingga dapat mencegah pertumbuhan kuman.

Kata Kunci : Angka Kuman Udara, Rumah Sakit



**FACTORS RELATED TO THE AIR MICROBACTERIAL NUMBERS IN  
THE AIR FORCE SOEMITRO SURABAYA HOSPITAL**

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**ABSTRACT**

*Microbiological examination of the floor swab in one of the inpatient rooms of Soemitro Air Force Hospital found that the number of microbacteria on the floor was 10 colonies. These results indicate that the floor in the inpatient room is indicated to be the growth of microorganisms. The purpose of this study was to determine the factors associated with airborne microbacteria counts at Soemitro Air Force Hospital in Surabaya.*

*This research was using analytic observational. The population in this study were all rooms in Soemitro Air Force Hospital totaling 47 rooms and 38 rooms were sampled which were divided into 4 (four) Risk Zones (Low, Medium, High and Very High Risk). Sampling technique is done by Stratified Random Sampling. Data analysis using Pearson Product Moment Test.*

*The results showed the average number of airborne microbacteria in Soemitro Air Force Hospital was 52.8 CFU / m<sup>3</sup>. The temperature was 30.8°C with a humidity of 61.8%. Lighting averaged 83.6 Lux. The results of the observation of sanitation assessment and space maintenance were 88.8% and 77.7% respectively. The Pearson Product Moment Test states that there was a relationship between temperature, humidity, lighting, room sanitation and room maintenance with airborne germ counts at Soemitro Air Force Hospital*

*Soemitro Air Force Hospital was expected to carry out proper maintenance and sanitation of space to prevent the growth of microbacteria both in the air and on the surface of objects in the room. Lighting, humidity and temperature in the room needed to be measured regularly (3 months) to determine compliance with quality standards so as to prevent the growth of germs.*

**Keywords** : *Air Microbacterial Number, Hospital*