

ABSTRAK

Kementerian Kesehatan RI
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ANALISIS FAKTOR KUALITAS FISIK DAN MIKROBIOLOGI UDARA
PADA PROSES PEMBERSIHAN DI RSUD BHAKTI DHARMA HUSADA 2024
xiv + 66 Halaman + 13 Tabel + 3 Gambar + 9 Lampiran

Pemeriksaan berkala kualitas udara di RSUD Bhakti Dharma Husada Surabaya menunjukkan bahwa ditemukan pada suatu ruang yang belum memenuhi persyaratan yaitu di ruangan produksi sediaan farmasi yang terletak dibawah area aliran udara searah/peralatan LAF (*Laminair air flow*) dan termasuk kedalam golongan ruangan kritis yang membutuhkan kesterilan tinggi. Penelitian ini bertujuan untuk menganalisis faktor kualitas fisik dan mikrobiologi udara pada proses pembersihan di ruang LAF (*Laminair air flow*).

Penelitian ini menggunakan desain penelitian deskriptif observasional dengan pendekatan *cross sectional*. Populasi dalam penelitian ini adalah udara ruangan yang diambil pada ruang LAF. Sampel dalam penelitian ini adalah udara ruangan sebelum dan sesudah kegiatan pembersihan ruangan. Variabel dalam penelitian ini meliputi suhu, kelembaban, pencahayaan, angka kuman udara, *Staphylococcus*, dan proses pembersihan ruangan. Teknik pengumpulan data dilakukan dengan observasi, pengukuran, dan pemeriksaan laboratorium. Data dianalisis dan disajikan secara deskriptif.

Hasil dari penelitian menunjukkan bahwa nilai angka kuman udara sebelum proses pembersihan tidak memenuhi standar baku mutu yaitu sebesar 16 CFU/m³ dan sesudah proses pembersihan telah memenuhi syarat yaitu dibawah 10 CFU/ m³. Pengukuran suhu dan kelembaban masih di antara standar baku mutu yang ditetapkan. Pada pengukuran pencahayaan masih belum memenuhi persyaratan yaitu sebesar 109,8 Lux, 110,4 Lux, 111,6 Lux dari standar yang ditentukan yaitu minimal 500 Lux.

Keberadaan mikroorganisme yang masih diatas standar ditemukan saat sebelum dilakukan pembersihan. Pengukuran suhu dan kelembaban dalam ruang telah memenuhi standar. Namun, pada pengukuran pencahayaan ruang LAF belum memenuhi baku mutu, sehingga diharapkan beberapa cara dapat dilakukan untuk mengoptimalkan tingkat pencahayaan.

Kata Kunci : Suhu, Kelembaban, Pencahayaan, Angka Kuman Udara, *Staphylococcus*.

Daftar Pustaka : 7 PMK + 26 Jurnal + 3 Buku

ABSTRACT

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ANALYSIS OF PHYSICAL AND MICROBIOLOGICAL FACTORS OF AIR QUALITY DURING THE CLEANING PROCESS AT BHAKTI DHARMA HUSADA REGIONAL HOSPITAL IN 2024.

xiv + 66 Pages + 13 Tables + 3 Figures + 9 Attachment

Regular air quality inspections at Bhakti Dharma Husada Hospital Surabaya showed that a room did not meet the required standards. This room, located under the unidirectional airflow area/equipment (LAF), was classified as a critical room requiring high sterility for pharmaceutical production. The study aimed to analyze the physical and microbiological air quality factors during the cleaning process in the LAF (Laminar Air Flow) room.

The study used a descriptive observational design with a cross-sectional approach. The population in this study was the air taken from the LAF room. The samples in this study were the air in the room before and after the cleaning activities. The variables in this study included temperature, humidity, lighting, airborne microbial count, Staphylococcus, and the cleaning process. Data collection techniques involved observation, measurement, and laboratory examination. The data were analyzed and presented descriptively.

The results of the study showed that the airborne microbial count before the cleaning process did not meet the quality standards, which was 16 CFU/m³, and after the cleaning process, it met the requirements, being below 10 CFU/m³. Measurements of temperature and humidity were within the established quality standards. However, the lighting measurements did not meet the requirements, which were 109.8 Lux, 110.4 Lux, and 111.6 Lux, compared to the minimum standard of 500 Lux.

The presence of microorganisms above the standard was found before the cleaning process. The measurements of temperature and humidity in the room met the standards. However, the lighting measurements in the LAF room did not meet the quality standards. Therefore, it was suggested that several measures be taken to optimize the lighting levels.

Keyword : Temperature, Humidity, Lighting, Germ Rate Air, Staphylococcus.

Bibliography : 7 PMK + 26 Journals + 3 Book