

**Hubungan antara Kualitas Fisik dan Mikrobiologi Udara dengan
Keluhan Sick Building Syndrome pada Unit Cutting dan Sewing PT.
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ABSTRAK

Lingkungan kerja yang buruk dapat mengakibatkan masalah bagi kesehatan karyawan. Jenis bangunan, alat dan bahan, proses pekerjaan serta ventilasi yang kurang baik mampu menimbulkan pencemaran dalam gedung. Pencemaran udara mengakibatkan kualitas udara menjadi buruk. Gedung unit cutting dan sewing memiliki atap dengan jenis baja, sistem ventilasi alami, dinding tembok, lantai ubin keramik, dan memiliki polutan debu. Beberapa karyawan mengeluhkan sakit kepala, gatal pada kulit, batuk, pilek, dan lemas. Tujuan penelitian ini adalah menganalisis hubungan antara kualitas fisik dan jumlah mikrobiologi udara dengan keluhan sick building syndrome pada karyawan unit cutting dan sewing.

Penelitian menggunakan metode survei observasional deskriptif dengan pendekatan cross sectional. Populasi penelitian berjumlah 1056 orang dengan sampel 76 orang. Instrumen penelitian menggunakan Questemp 34, Plate Nutrient Agar, dan kuesioner. Data diolah dan dianalisa dengan menggunakan uji statistik Correlation Pearson Product Moment.

Hasil menunjukkan bahwa kualitas fisik suhu = 29,51 Â°C dan kelembaban = 67,58 % masih berada pada batas yang aman. Angka total mikrobiologi pada salah satu titik pengukuran memiliki jumlah yang tinggi yaitu > 500 koloni/m³. Keluhan sick building syndrome paling banyak dirasakan setiap hari yaitu lelah atau mengantuk. Kualitas fisik (suhu P-value=0,017, kelembaban P-value=0,019) memiliki hubungan yang signifikan dengan keluhan sick building syndrome. Angka total mikrobiologi udara tidak memiliki hubungan yang signifikan dengan keluhan sick building syndrome (P-value 0,340).

Disarankan bagi perusahaan untuk melakukan perbaikan dan pemeliharaan exhaust fan agar sirkulasi udara dalam gedung berjalan dengan lancar.

Kata Kunci : sick building syndrome, kualitas udara dalam ruangan, ventilasi

**RELATIONSHIP BETWEEN PHYSICAL QUALITY AND AIR
MICROBIOLOGY WITH THE SYMPTOMS OF SICK BUILDING
SYNDROME IN CUTTING AND SEWING UNIT PT. SAI APPAREL
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ABSTRACT

Poor working environment can lead to the health problems for employees. Buildings, equipment and materials, work processes and poor ventilation can be causing pollution in the building. Air pollution resulting poor air quality. Cutting and sewing unit building has a roof with the type of steel, natural ventilation systems, walls, ceramic tile floors, and has a dust pollutants. Some employees complained of headaches, itchy skin, coughing, runny nose, and fatigue. The purpose of this study was to analyze the relationship between the physical and the number of microbiological quality of air with complaints of sick building syndrome in cutting and sewing unit employees.

The study was observational survey with cross sectional approach. The study population amounted to 1056 people with a sample of 76 people. The study's instrument used Questemp 34, Plate Nutrient Agar, and questionnaires. The data processed and analyzed using statistical test of Pearson Product Moment Correlation.

Results indicate that the physical quality temperature = 29.51 °C and humidity = 67.58 % still be on the safe side. The total number of microbiology at one measuring point has a high amount ie > 500 colonies/m³. Complaints sick building syndrome was most felt every day when tired or sleepy. Physical quality (temperature P-value = 0.017, humidity P-value = 0.019) have a significant relationship with complaints of sick building syndrome. The total number microbiological air has had no a significant relationship with the complaint sick building syndrome (P-value 0.340).

It is advisable for the company to do repair and maintenance of exhaust fan for air circulation in the building running smoothly.

Keyword : sick building syndrome, indoor air quality, ventilation