ANALISIS DETERMINAN GANGGUAN FUNGSI PARU PADA PEKERJA INDUSTRI MEBEL DI KECAMATAN JATIASIH TAHUN 2025

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Abstrak

Menurut Riskesdas (2018), prevalensi Penyakit Paru Obstruktif Kronis (PPOK) di Indonesia tercatat sebesar 3,7%. Berbagai penelitian di industri mebel menemukan proporsi gangguan paru pada pekerja tinggi dengan faktor utama paparan debu. Penelitian ini bertujuan menganalisis determinan gangguan fungsi paru pekerja industri mebel di Kecamatan Jatiasih, Kota Bekasi. Desain studi yang digunakan adalah *cross-sectional*. Dari populasi yang tidak diketahui, didapatkan 121 pekerja sebagai sampel dengan menggunakan teknik *purposive sampling*. Data dianalisis secara univariat dan bivariat dengan uji *chi-square*. Karakteristik Individu diukur dengan menggunakan kuesioner, sedangkan $PM_{2.5}$ dan PM_{10} diukur dengan menggunakan *air quality monitor*. Spirometer MIR Spirolab III digunakan untuk mengukur kapasitas vital paru. Hasil penelitian menunjukkan 98 dari 121 (81%) pekerja mengalami gangguan fungsi paru. Tidak terdapat hubungan antara variabel karakteristik individu (usia, status gizi, durasi kerja, lama kerja, lama merokok, jumlah rokok perhari, derajat merokok, riwayat penyakit, penggunaan masker) dan faktor lingkungan ($PM_{2.5}$ dan PM_{10}) dengan gangguan fungsi paru. Kelompok berisiko memiliki kemungkinan beberapa kali lipat untuk terkena gangguan fungsi paru. Responden disarankan untuk mengurangi konsumsi rokok dan lebih memerhatikan faktor-faktor yang berisiko terhadap gangguan fungsi paru.

Kata kunci: $PM_{2,5}$, gangguan paru, pekerja mebel

ANALYSIS OF DETERMINANTS OF IMPAIRED LUNG FUNCTION IN FURNITURE INDUSTRY WORKERS IN JATIASIH DISTRICT YEAR 2025

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Abstract

According to Riskesdas (2018), Chronic Obstructive Pulmonary Disease (COPD) prevalence in Indonesia was at 3.7%. Studies in furniture industries found a high rate of lung disorders among workers, mainly due to dust exposure. This study aimed to analyze the determinants of lung function impairment in furniture industry workers in Jatiasih District, Bekasi City. The study used a cross-sectional design. Of an unknown population, 121 workers were recruited as samples using a purposive sampling technique. Individual characteristics were measured using a questionnaire, while $PM_{2.5}$ and PM_{10} were measured using Air Quality Monitor. Spirometer MIR Spirolab III was used to measure vital lung capacities. The results showed that 98 of 121 workers (81%) experienced lung function impairment. There was no significant association between individual characteristics (age, nutritional status, work duration, length of employment, smoking duration, number of cigarettes per day, smoking intensity, medical history, mask usage) and environmental faktors ($PM_{2.5}$ and PM_{10}) with lung function impairment. However, the at-risk groups had several times higher likelihood of experiencing lung function impairment. Therefore, respondents are advised to reduce cigarette smoking and pay more attention to risk factors related to lung function impairment.

Keywords: $PM_{2,5}$, lung impairment, furniture workers