



UNIVERSITAS ANDALAS

**HUBUNGAN KADAR DEBU KAYU (PM₁₀) TERHADAP KEJADIAN
ISPA PADA PEKERJA DI INDUSTRI MEBEL KAYU DI
KECAMATAN KOTO TANGAH KOTA PADANG**

Oleh :

Wahyuni Rizki Putri

No. BP. 1311211125

Pembimbing I : Septia Pristi Rahmah, SKM, MKM

Pembimbing II : Putri Nilam Sari, SKM, M.Kes

FAKULTAS KESEHATAN MASYARAKAT

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WAHYUNI RIZKI PUTRI, NO. BP. 1311211125

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xi + 81 halaman, 10 tabel, 11 gambar, 10 lampiran

ABSTRAK

Tujuan Penelitian

Debu kayu dapat mempengaruhi kesehatan tenaga kerja atau menyebabkan timbulnya penyakit akibat kerja. Pekerja di industri mebel kayu menjadi salah satu populasi yang berisiko tinggi mengalami gangguan pernapasan terutama terkena infeksi saluran pernapasan akut. Penelitian ini dilakukan untuk melihat hubungan kadar debu kayu (PM₁₀), lama paparan, kebiasaan merokok dan penggunaan alat pelindung diri terhadap kejadian infeksi saluran pernapasan akut pada pekerja industri mebel kayu di Kecamatan Koto Tangah.

Metode

Penelitian ini merupakan penelitian kuantitatif dengan desain penelitian *cross sectional*. Populasi penelitian yaitu pekerja di industri mebel kayu di Kecamatan Koto Tangah yang berjumlah 124 pekerja, sedangkan sampel menggunakan *purposive sampling* dengan jumlah sampel sebanyak 55 pekerja. Analisis data menggunakan analisis univariat dan analisis bivariat melalui uji statistik *chi-square* dengan derajat kepercayaan 95% ($\alpha=0,05$).

Hasil

Hasil penelitian pada analisis univariat didapatkan distribusi frekuensi ISPA 74,5% pekerja dengan kejadian ISPA, kadar debu kayu (PM₁₀) tinggi 89,1%, lama paparan berisiko 61,8%, kebiasaan merokok 65,5% dan penggunaan alat pelindung diri 23,6%, sedangkan pada analisis bivariat terdapat hubungan bermakna antara kadar debu kayu ($p\text{-value}=0,031$) dengan *Prevalence Ratio* sebesar 2,388, lama paparan ($p\text{-value}=0,008$) dengan *Prevalence Ratio* sebesar 1,684, kebiasaan merokok ($p\text{-value}=0,010$) dengan *Prevalence Ratio* sebesar 1,636, alat pelindung diri ($p\text{-value}=0,000$) dengan *Prevalence Ratio* sebesar 3,921 terhadap kejadian ISPA pada pekerja di industri mebel kayu.

Kesimpulan

Kadar debu kayu (PM₁₀), lama paparan, kebiasaan merokok dan penggunaan alat pelindung diri menunjukkan adanya hubungan yang bermakna dengan kejadian ISPA. Disarankan kepada pemilik industri mebel kayu untuk menyediakan alat pelindung diri berupa masker. Dinas Lingkungan Hidup diharapkan melakukan pengawasan rutin terhadap kondisi lingkungan di industri mebel kayu.

Daftar Pustaka : 47 (1992-2016)

Kata Kunci : PM₁₀ dan Infeksi Saluran Pernapasan Akut

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Wahyuni Rizki Putri, No. BP. 1311211125

RELATIONSHIP OF THE LEVELS OF WOOD DUST (PM₁₀) WITH THE EVENTS OF ACUTE RESPIRATORY TRACT INFECTIONS BY THE WORKERS IN THE WOODS FURNITURE INDUSTRY IN THE KOTO TANGAH REGION PADANG CITY

xi + 81 pages + 10 tables + 11 pictures + 10 attachments

ABSTRACT

Objective

Wood dust can affect the health of the worker or can cause a disease because of the work itself. The worker of the wood furniture industry become one of the population with the higher risk that can suffer from respiratory disturbance, especially acute respiratory tract infections. This research was done to see the relationship between the levels of wood dust (PM₁₀), long exposure, the habit of smoking and the using of self protection device with the events of acute respiratory tract infections by the workers in the woods furniture industry in the Koto Tangah region, Padang city.

Method

This research is a quantitative research with cross sectional research design. The subjects are the workers of the wood furniture industry in the region of Koto Tangah, there are about 124 workers, while the sample is using purposive sampling with total sample of 55 workers. The data analysis using univariate analysis and bivariate analysis through chi-square statistic test with 95% of trusts degree ($\alpha=0,05$).

Result

The result of the research from univariate analysis, the distribution frequency of acute respiratory tract infections for about 74,5% workers suffers from acute respiratory tract infections, the content of wood dust (PM₁₀) for about 89,1% high, long exposure with risk for about 61,8 %, the habit of smoking for about 65,5% and the using of self protection device for about 23,6%. While from bivariate analysis, founded the connection between the content of wood dust (p value=0,031) with a Prevalence Ratio of 2,388, long exposure (p value=0,008) with a Prevalence Ratio of 1,684, the habit of smoking (p value=0,010) with a Prevalence Ratio of 1,636, self protection device (p value=0,000) with a Prevalence Ratio of 3,921 to acute respiratory tract infections event from the workers of the wood furniture industry.

Conclusion

The levels of wood dust (PM₁₀), long exposure, the habit of smoking and the using of self protection device shows the important connection with the events of acute respiratory tract infections. Recommendation for the owner of the wood furniture industry, to provides self protection device from of masker. The Office of the Environment is expected to conduct regular monitoring of environmental conditions in the wood furniture industry.

References : 47 (1992-2016)

Keywords : PM₁₀ And Acute Respiratory Tract Infections