

ABSTRAK

PENGARUH PEKERJAAN SEBAGAI PEMBAKAR GENTENG TRADISIONAL TERHADAP KADAR CO DALAM NAPAS DAN SATURASI OKSIGEN (SPO₂) PADA LAKI-LAKI DEWASA DI DESA BULOKARTO KABUPATEN PRINGSEWU

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Latar Belakang: World Health Organization (WHO) menyebutkan prevalensi mortalitas akibat polusi udara sebesar 7 juta setiap tahunnya. Paparan polusi dapat mengakibatkan berbagai masalah kesehatan. Proses pembakaran genteng tradisional berisiko menghasilkan polusi karbon monoksida. Penelitian ini bertujuan mengetahui pengaruh pekerjaan sebagai pembakar genteng tradisional terhadap kadar karbon monoksida dan saturasi oksigen pada laki-laki dewasa di desa Bulukarto, Pringsewu.

Metode Penelitian: Penelitian analitik observasional dengan pendekatan *cross sectional*. Responden terdiri dari 30 pekerja pembakar genteng dengan teknik *total sampling* dan 30 pekerja non pembakar genteng. Variabel bebas penelitian ini adalah pekerjaan serta variabel terikat yaitu kadar CO dan saturasi oksigen. Penelitian ini menggunakan data primer berupa pengukuran langsung dan dianalisis menggunakan uji *Mann-Whitney*.

Hasil Penelitian: Hasil penelitian menunjukkan rerata kadar CO pekerja pembakar genteng 18.93 ppm dan rerata saturasi oksigen 97.87%. Sementara pada pekerja non pembakar genteng didapatkan rerata kadar CO 11.63 ppm dan rerata saturasi oksigen 98.07%. Hasil uji statistik didapatkan adanya pengaruh pekerjaan sebagai pembakar genteng tradisional terhadap kadar CO ($p = 0.002$). Sementara hasil uji statistik saturasi oksigen didapatkan tidak adanya pengaruh pekerjaan sebagai pembakar genteng tradisional terhadap nilai saturasi oksigen ($p = 0.719$).

Kesimpulan: Terdapat pengaruh pekerjaan sebagai pembakar genteng tradisional terhadap kadar CO pada laki-laki dewasa di Bulukarto, Pringsewu. Sementara tidak terdapat pengaruh pekerjaan sebagai pembakar genteng tradisional terhadap nilai saturasi oksigen pada laki-laki dewasa di Bulukarto, Pringsewu.

Kata Kunci: Karbon monoksida, Paparan, Pembakar genteng, Saturasi Oksigen

ABSTRACT

THE EFFECT OF TRADITIONAL ROOF TILE BURNER WORKER ON CO LEVELS IN BREATH AND OXYGEN SATURATION (SPO₂) IN ADULT MALES IN BULOKARTO VILLAGE, PRINGSEWU DISTRICT

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Background: *The World Health Organization (WHO) states that the prevalence of mortality due to air pollution is 7 million each year. Exposure to pollution can lead to various health problems. The process of burning traditional tiles is at risk of producing carbon monoxide pollution. This study aims to determine the effect of working as a traditional tile burner on carbon monoxide levels and oxygen saturation in adult men in Bulukarto village, Pringsewu.*

Methods: *Observational analytical study with a cross-sectional approach. The respondents consisted of 30 tile kiln workers using total sampling technique and 30 non-tile kiln workers. The independent variable in this study is occupation, while the dependent variables are CO levels and oxygen saturation. This study uses primary data in the form of direct measurements and is analyzed using the Mann-Whitney test.*

Results: *The research results show an average CO level of 18.93 ppm and an average oxygen saturation of 97.87% among tile-burning workers. Meanwhile, among non-tile-burning workers, the average CO level was found to be 11.63 ppm and the average oxygen saturation was 98.07%. The results of the statistical test showed an effect of working as a traditional tile burner on CO levels ($p = 0.002$). Meanwhile, the results of the oxygen saturation statistical test showed no effect of working as a traditional roof tile burner on oxygen saturation levels ($p = 0.719$).*

Conclusion: *There is an influence of the job as a traditional tile burner on CO levels in adult men in Bulukarto, Pringsewu. Meanwhile, there is no influence of the job as a traditional tile burner on the oxygen saturation levels in adult men in Bulukarto, Pringsewu.*

Keywords: *Carbon monoxide, Exposure, Roof tile burner, Oxygen saturation*