

## ABSTRAK

**Latar Belakang:** Proses pembakaran ikan menghasilkan karbon monoksida yang bersifat beracun dimana saat masuk kedalam darah dapat menyebabkan reaksi dengan hemoglobin menjadi ikatan karboksihemoglobin (COHb), sehingga tubuh merespon produksi eritrosit sehingga eritrosit akan meningkat dan menyebabkan berbagai keluhan kesehatan. Asap dari pembakaran ikan menyebar ke udara dan dihirup secara terus menerus oleh pedagang ikan bakar.

**Tujuan:** Untuk mengetahui pengetahuan, sikap, perilaku dan kondisi kesehatan pada pedagang ikan bakar yang terpapar karbon monoksida dari asap pembakaran ikan di Palangka Raya.

**Metode:** Metode yang digunakan adalah kuantitatif dengan desain *cross sectional*. Responden adalah pedagang ikan bakar yang terpapar asap. Penelitian ini akan dilakukan pengukuran kadar karbon monoksida di udara, pengukuran kadar hemoglobin, pengukuran jumlah eritrosit, wawancara tentang kondisi kesehatan, pengetahuan, sikap dan perilaku pedagang ikan bakar. Pengukuran karbon monoksida menggunakan *Carbon Monoxide Meter* bersamaan dengan pengambilan sampel darah untuk diukur kadar hemoglobin dan jumlah eritrosit pada pedagang ikan bakar yang terpapar karbon monoksida.

**Hasil:** Pada penelitian ini menggunakan total sampling dimana terdapat 45 lokasi pedagang ikan bakar yang ada di Palangka Raya. Dari 45 lokasi, hanya 31 warung ikan bakar yang bersedia menjadi responden. Total responden yang bersedia dalam penelitian ini yaitu 42 responden, hal ini dikarenakan beberapa warung ikan bakar memiliki dua orang pemanggang yang terpapar asap. Usia responden dalam penelitian ini antara 16 tahun hingga 77 tahun (rata-rata = 38,6; standar deviasi = 12,8) dengan lama kerja antara 1 sampai 23 tahun (rata-rata = 5,8; standar deviasi = 4,6) dan durasi paparan asap perhari yaitu antara 5 sampai 19 jam (rata-rata = 10,8; standar deviasi = 3,5). Lokasi pedagang ikan bakar di Palangka Raya 70,7% berada di pinggir jalan. Keluhan kesehatan terbanyak yaitu gangguan penglihatan (21%), 19% responden yang memiliki kadar hemoglobin rendah dan 21% responden memiliki jumlah eritrosit yang tinggi. Kadar karbon monoksida pada tungku pembakaran 79% di antara 101 sampai 250 ppm, kadar karbon monoksida di area pernapasan pedagang ikan bakar 55% di antara 50 sampai 100 ppm dan kadar karbon monoksida di jalan 100% kurang dari 50 ppm atau berada antara 0 ppm hingga 17 ppm. Tingkat pengetahuan responden kurang, sikap dan perilaku pedagang ikan bakar dikategorikan kurang ketika terpapar asap.

**Kesimpulan:** Tidak ada korelasi antara karbon monoksida, pengetahuan, sikap dan perilaku terhadap kadar hemoglobin dan jumlah eritrosit. Terdapat korelasi antara pengetahuan dan sikap, ada korelasi kuat antara sikap dan perilaku. Terdapat korelasi antara durasi paparan dan kadar hemoglobin.

**Kata Kunci:** Karbon Monoksida, Pedagang Ikan Bakar, Pengetahuan, Sikap, Perilaku, Kondisi Kesehatan

## ABSTRACT

**Background:** The process of burning fish produces carbon monoxide which is toxic, which when it enters the blood can cause a reaction with hemoglobin to form carboxyhemoglobin (COHb) bonds, so that the body responds to the production of erythrocytes so that erythrocytes will increase and cause various health complaints. The smoke from burning fish spreads into the air and is inhaled continuously by grilled fish traders.

**Objective:** To determine the knowledge, attitudes, practice and health conditions of grilled fish traders who are exposed to carbon monoxide from smoke from burning fish in Palangka Raya.

**Method:** The method used is quantitative with a cross sectional design. Respondents are grilled fish traders who are exposed to smoke. This research will carry out measurements of carbon monoxide levels in the air, measurements of hemoglobin levels, measurements of erythrocyte counts, interviews about health conditions, knowledge, attitudes and practice of grilled fish traders. Measuring carbon monoxide using a Carbon Monoxide Meter in conjunction and at the same time taking blood samples to measure hemoglobin levels and the number of erythrocytes in grilled fish exposed to carbon monoxide.

**Results:** This research used total sampling where there were 45 locations of grilled fish traders in Palangka Raya. Of the 45 locations, only 31 grilled fish stalls were willing to be respondents. The total number of respondents who were willing to participate in this research was 42 respondents, this was because several grilled fish stalls had two grillers who were exposed to smoke. The ages of respondents in this study ranged from 16 years to 77 years (mean = 38.6; SD = 12.8) with length of work between 1 and 23 years (mean = 5.8; SD = 4.6) and duration of smoke exposure per day, namely between 5 and 19 hours (rata-rata = 10.8; SD = 3.5). 70.7% of the locations of grilled fish traders in Palangka Raya are on the roadside. The most common health complaints were vision problems (21%), 19% of respondents had low hemoglobin levels and 21% of respondents had high erythrocyte counts. Carbon monoxide levels in burning stoves are 79% between 101 and 250 ppm, carbon monoxide levels in the facial area of grilled fish traders are 55% between 50 and 100 ppm and carbon monoxide levels on the road are 100% less than 50 ppm or between 0 ppm and 17 ppm. The level of knowledge of respondents is poor, the attitudes and practice of grilled fish traders are categorized as poor when exposed to smoke.

**Conclusion:** There is no correlation between carbon monoxide, knowledge, attitudes and practice on hemoglobin levels and erythrocyte counts. There is a correlation between knowledge and attitudes, there is a strong correlation between attitudes and practice. There is a correlation between exposure duration and hemoglobin levels.

**Keywords:** Carbon Monoxide, Grilled Fish Traders, KAP, Health Conditions