

ABSTRAK

Latar Belakang: Paparan asap dalam rongga mulut dapat berisiko pada perubahan jaringan epitel mukosa, flora normal, dan inflamasi jaringan rongga mulut. Kandungan kimia di dalam asap dapat memicu peningkatan jumlah leukosit yang berlanjut pada gingivitis dan periodontitis.

Tujuan: Membuktikan pengaruh paparan asap pengasapan ikan terhadap jumlah leukosit cairan sulkus gingiva pekerja pengasapan ikan (Studi pada pekerja pengasapan ikan di Desa Bandarharjo Kota Semarang, Jawa Tengah).

Metode: Penelitian ini bersifat observasi analitik dengan desain *cross sectional*. Penelitian dilakukan kepada pekerja pengasapan dengan masa kerja 3 tahun (kelompok terpapar) dan bukan pekerja (kelompok tidak terpapar), pengumpulan sampel dilakukan dengan cara simple random sampling dan besar sampel di hitung menggunakan rumus lemeshow dan didapatkan jumlah 41 responden pada setiap kelompoknya.

Hasil: Rata-rata kadar leukosit cairan sulkus gingiva kelompok terpapar asap sebesar $9.636,6 \pm 459,49 \text{ mm}^3$, secara bermakna lebih tinggi dari pada kelompok tidak terpapar yaitu $6.493,9 \pm 561,72 \text{ mm}^3$ ($p=0,000$).

Kesimpulan: Paparan asap pengasapan ikan berpengaruh meningkatkan jumlah leukosit cairan sulkus gingiva pekerja pengasapan ikan di Desa Bandarharjo Semarang.

Kata kunci: Paparan asap, Jumlah leukosit, Cairan sulkus gingiva.

ABSTRACT

Background: Smoke exposure to the oral cavity could cause the risk of mucosal epithelial tissue changes, normal flora, and inflammation of the oral cavity tissue. The chemical content in the smoke can trigger an increase in the number of leukocytes that continue in gingivitis and periodontitis.

Aims: This research was to prove there is an effect of direct contact with the smoke on the number of leukocytes of gingival sulcus fluid (Study on fish-smoking factory in Bandarharjo Village, Semarang City, Central Java).

Method: This research is an analytic observation with a cross-sectional design. The study was conducted on smoking workers with a work period of 3 years (exposed groups) and non-workers (unexposed groups), sample collection was done by simple random sampling and the sample size was calculated using the Lemeshow formula and obtained 41 respondents in each group.

Result: The mean of leukocyte counts from gingival sulcus fluid in a group exposed was $9.636.6 \pm 459.49 \text{ mm}^3$, significantly higher than the unexposed group that was $6.493.9 \pm 561.72 \text{ mm}^3$ ($p = 0.000$).

Conclusion: Smoke exposure in the smoking fish industry increased the leukocyte count of gingival sulcus fluid on the workers of smoking fish industry in the village of Bandarharjo Semarang.

Keywords: Smoke Exposure, Leukocyte Count, Gingival Sulcus Fluid.