

ABSTRAK

HUBUNGAN ANTARA IKLIM KERJA PANAS DAN ASUPAN CAIRAN DENGAN STATUS HIDRASI PADA PEKERJA PT. GREAT GIANT PINEAPPLE

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Latar Belakang: Pekerja di lingkungan panas berisiko mengalami dehidrasi akibat paparan suhu tinggi dan kurangnya asupan cairan. Penelitian ini bertujuan mengetahui hubungan antara iklim kerja panas dan asupan cairan dengan status hidrasi pada pekerja PT. Great Giant Pineapple.

Metode: Penelitian observasional analitik dengan pendekatan *cross sectional* dilakukan pada Oktober 2025 di divisi *factory-department cannery* PT. Great Giant Pineapple. Sampel sebanyak 100 pekerja dipilih menggunakan rumus Lemeshow. Variabel bebas adalah iklim kerja panas dan asupan cairan, sedangkan variabel terikat adalah status hidrasi. Data dikumpulkan melalui pengukuran Indeks Suhu Bola Basah (ISBB) dan pemeriksaan berat jenis urin menggunakan refraktometer. Analisis data dilakukan dengan uji chi-square.

Hasil: Sebagian besar pekerja (80%) bekerja pada area dengan iklim kerja panas di atas NAB, dan 38% pekerja mengalami dehidrasi. Hasil uji statistik menunjukkan tidak terdapat hubungan signifikan antara iklim kerja panas dengan status hidrasi ($p = 0,837$). Namun, terdapat hubungan signifikan antara asupan cairan dengan status hidrasi ($p = 0,000$). Pekerja dengan asupan cairan tidak adekuat memiliki risiko 31 kali lebih besar mengalami dehidrasi dibandingkan pekerja dengan asupan cairan adekuat ($OR = 31,407$; 95% CI 10,224–96,483).

Kesimpulan: Tidak terdapat hubungan signifikan antara iklim kerja panas dengan status hidrasi pada pekerja PT. Great Giant Pineapple, namun terdapat hubungan signifikan antara asupan cairan dan status hidrasi. Upaya pencegahan perlu difokuskan pada peningkatan akses air minum, edukasi hidrasi, serta pengawasan konsumsi cairan selama bekerja.

Kata Kunci: iklim kerja panas, asupan cairan, status hidrasi, dehidrasi, pekerja industri

ABSTRACT

THE RELATIONSHIP BETWEEN HOT WORK CLIMATE AND FLUID INTAKE WITH HYDRATION STATUS AMONG WORKERS AT PT. GREAT GIANT PINEAPPLE

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Background: Workers exposed to high temperatures are at risk of dehydration due to excessive fluid loss. This study aimed to determine the relationship between hot work climate and fluid intake with hydration status among workers at PT. Great Giant Pineapple.

Methods: This study used an analytical observational design with a cross-sectional approach involving 95 workers from the factory–cannery department. The hot work climate was measured using the Wet Bulb Globe Temperature (WBGT) index, fluid intake was assessed through a questionnaire, and hydration status was determined by urine specific gravity using a refractometer. Data were analyzed using the chi-square test.

Results: A total of 80% of workers were exposed to hot work climates above the threshold limit value (TLV), and 38% were found to be dehydrated. The results showed no significant relationship between hot work climate and hydration status ($p = 0.837$). However, there was a significant relationship between fluid intake and hydration status ($p = 0.000$; OR = 31.407; 95% CI 10.224–96.483).

Conclusions: : Fluid intake has a significant relationship with hydration status, while hot work climate does not. Increasing water consumption and improving the availability of drinking water facilities are essential to prevent dehydration among workers in hot environments.

Keywords: hot work climate, fluid intake, hydration status, dehydration, industrial workers