ABSTRACT

THE RELATIONSHIP BETWEEN WORKING ENVIROVMENT TEMPERATURE AND HYDRATION STATUS OF PRODUCTION WORKERS IN THE CRACER INDUSTRY AT NATAR SOUTH LAMPUNG

By

NINIKE APRIYANA

Background: Cracker industry production workers in Natar, South Lampung are a population who often perform physical activity in a hot environment for a long time. Sources of heat in the production section include production machines and air vents, causing high room temperatures due to lack of air exchange. It is at risk of dehydration. Dehydration in the right areas of excess body fluids due to fluid imbalance. Based on several studies, which state that a hot work environment temperature can affect the hydration status of workers.
Purpose: To determine the relationship between the temperature of the hot working environment temperature and hydration status of production workers in the cracer industry at Natar South Lampung.
Methods: This type of research is observational analytic with a cross sectional approach. The population of this research is workers who work in the production division in cracer industry at Natar South Lampung. The sampling technique used was total sampling. Research work environment was measured using questtemp heat stress monitors and indicators of hydration status using urine color. Data analysis was performed using the chi square test.
Results: The results of the study were divided into production with the temperature of working environment >NAB, there were 30 workers (75,0%) dehydrated and 10 workers (25,0%) not dehydrated. While in the production section the temperature of the working environment <NAB, there are 6 workers (37,5%) dehydrated and 10 workers (62,5%) not dehydrated. In this study, the coefficient value of hot work environment with hydration status was p= 0,019 (p< 0.05).
Conclusion: There is a relationship between the temperature of the hot working environment and hydration status of production workers in the cracer industry at Natar South Lampung.

Key words: Hot work environment, hydration status, dehydration

ABSTRAK

HUBUNGAN ANTARA SUHU LINGKUNGAN KERJA DENGAN STATUS HIDRASI PADA PEKERJA BAGIAN PRODUKSI DI INDUSTRI KERUPUK NATAR LAMPUNG SELATAN

Oleh

NINIKE APRIYANA

Latar Belakang: Pekerja bagian produksi di industri kerupuk Natar Lampung Selatan merupakan populasi yang sering melakukan aktivitas fisik di lingkungan yang panas dalam waktu yang lama. Sumber panas pada bagian produksi diantaranya mesin produksi dan kurangnya ventilasi udara sehingga menyebabkan suhu ruangan tinggi karena kurangnya pertukaran udara. Hal tersebut beresiko untuk mengalami dehidrasi. Dehidrasi merupakan hilangnya cairan tubuh yang berlebihan karena tidak diimbanginya asupan cairan. Berdasarkan beberapa penelitian menyatakan bahwa suhu lingkungan kerja dapat memengaruhi kondisi status hidrasi para pekerja.
Tujuan: Mengetahui hubungan antara suhu lingkungan kerja dengan status hidrasi pada pekerja bagian produksi di industri kerupuk Natar Lampung Selatan.
Metode: Jenis penelitian ini observasional analitik dengan pendekatan *cross sectional*. Populasi penelitian ini adalah tenaga kerja bagian produksi di industri kerupuk Natar Lampung Selatan. Teknik pengambilan sampel yang digunakan adalah *total sampling*. Penelitian suhu lingkungan kerja diukur menggunakan *questtemp heat stress monitor* dan indikator status hidrasi menggunakan warna urin. Analisis data dilakukan dengan uji *chi square*.
Hasil: hasil penelitian di bagain produksi yang suhu lingkungan kerja >NAB terdapat 30 pekerja (75,0%) dehidrasi dan 10 pekerja (25,0%) tidak dehidrasi. Sedangkan di bagian produksi yang suhu lingkungan kerja <NAB terdapat 6 pekerja (37,5%) dehidrasi dan 10 pekerja (62,5%) tidak dehidrasi. Pada penelitian ini didapatakan nilai *p-value* suhu lingkungan kerja dengan status hidrasi sebesar p= 0,019 (p< 0,05).
Kesimpulan: Terdapat hubungan antara suhu lingkungan kerja dengan status hidrasi pada pekerja bagian produksi di industri kerupuk Natar Lampung Selatan.

Kata kunci: Suhu lingkungan kerja, status hidrasi, dehidrasi