

ABSTRACT

Exposure to heat stress is one factor that affects productivity and work performance, not only that, if exposure to heat stress can not be controlled, properly it will potentially lead to various health complaints for workers. So this research aims to study, analyze and control a variety of subjective complaints felt by workers due to exposure to heat in the area of Steel Melting Shop PT. X.

This research is a analytical with cross sectional approach. The samples in this study were all workers who worked on shift 1 which amounted to 30 workers with variables to be studied is work climate, workload, heat stress event, age, educational level, body mass index (BMI), acclimatization status, health status, amount of water consumed, length of service and duration of rest.

The results show that the work area of Electric Art Furnace (EAF) and Continous Casting Machine (CCM) that located in the Steel Melting Shop (SMS) area, ISBB value is 32.52 °C and 32.29 °C. Furthermore, subjective complaints are most widely perceived respondents are sweating (96.7%), feel thirsty (90%) and skin feels hot (63.4%). And all respondents experienced heat stress incidence with the majority of medium workload (80%), age 26-40 years (60%), high school / vocational education (80%), normal BMI (80%), acclimatized workers 93.3%, healthy worker (100%), total water consumption more than 8 glass (53,3%), service life more than 10 years (66,6%) and duration of rest 60 minutes (46,7%). By using chi-square test, it was found that there was no significant correlation between research variables with subjective complaints felt by workers in the area of SMS PT. X.

The companies are advised to make an instruction poster for workers to consume at least 8 glasses of water during work, perform cleaning and maintenance facilities of water consumption, and the last is required to conduct special training for new workers who will be placed in the area of SMS, so that the worker can adjust his body with a hot working environment.

Keyword : Subjective complaints, exposure to heat stress, Steel Melting Shop (SMS)

ABSTRAK

Pajanan tekanan panas merupakan salah satu faktor yang berpengaruh terhadap produktivitas dan performa kerja, jika pajanan tekanan panas tidak bisa dikendalikan dengan baik maka akan berpotensi menimbulkan berbagai keluhan kesehatan bagi para pekerja. Sehingga penelitian ini bertujuan untuk mempelajari, menganalisis dan mengendalikan berbagai keluhan subjektif yang dirasakan oleh pekerja akibat pajanan panas di area Steel Melting Shop PT. X.

Penelitian ini merupakan analitik dengan pendekatan cross sectional. Sampel penelitian ini adalah seluruh pekerja pada shift 1 berjumlah 30 pekerja dengan variabel penelitian yaitu iklim kerja, beban kerja, kejadian tekanan panas, umur, tingkat pendidikan, indeks massa tubuh (IMT), status aklimatisasi, status kesehatan, jumlah mengkonsumsi air, masa kerja dan lama istirahat.

Hasil penelitian menunjukkan bahwa area kerja Electric Art Furnace (EAF) dan Continous Casting Machine (CCM) yang berada di area Steel Melting Shop (SMS) memiliki nilai ISBB indoor 32,52 °C dan 32,29 °C. Selanjutnya keluhan subjektif yang paling banyak dirasakan responden adalah banyak mengeluarkan keringat (96,7%), merasa cepat haus (90%) dan kulit terasa panas (63,4%). Semua responden mengalami kejadian tekanan panas dengan mayoritas beban kerja sedang (80%), umur 26 – 40 tahun (60%), tingkat pendidikan SMA/SMK sederajat (80%), IMT normal (80%), pekerja teraklimatisasi (93,3%), pekerja sehat (100%), jumlah mengkonsumsi air > 8 gelas (53,3%), masa kerja > 10 tahun (66,6%) dan lama istirahat 60 menit (46,7%). Dengan menggunakan uji chi-square didapatkan bahwa tidak ada hubungan yang signifikan antara variabel penelitian dengan keluhan subjektif yang dirasakan oleh pekerja di area Steel Melting Shop (SMS) PT. X.

Perusahaan disarankan membuat poster instruksi untuk mengkonsumsi air 8 gelas selama bekerja, melakukan pembersihan dan perawatan fasilitasnya dengan baik serta melakukan pelatihan khusus kepada pekerja baru yang akan ditempatkan di area SMS sehingga pekerja tersebut dapat menyesuaikan dengan lingkungan kerja panas.

Kata Kunci : Keluhan Subjektif, Pajanan Tekanan Panas, Steel Melting Shop (SMS)