INTISARI

Latar Belakang: Industri kayu lapis sangat erat kaitannya dengan masalah kondisi lingkungan kerja yang bisa menyebabkan *Sick Building Syndrome* (SBS) seperti sakit kepala, pusing, iritasi mata dan tenggorokan, batuk, kulit kering, ruam, lelah, dan sesak napas. Pekerja di perusahaan kayu lapis CV X, Kabupaten Kendal, Jawa Tengah mengeluhkan SBS. Paparan risiko dan bahaya berupa kadar formaldehid (HCHO) lingkungan, intensitas kebisingan, dan intensitas pencahayaan diketahui adalah faktor yang berhubungan dengan SBS pada pekerja.

Tujuan Penelitian: Untuk mengetahui hubungan kadar formaldehid lingkungan, intensitas kebisingan, dan intensitas pencahayaan serta faktor yang paling berhubungan dengan SBS

Metode Penelitian: Jenis penelitian adalah kuantitatif observasional menggunakan desain *cross sectional*. Subjek penelitian adalah 31 orang. Variabel independen terdiri atas kadar formaldehid lingkungan, intensitas kebisingan,dan intensitas pencahayaan. Variabel dependen adalah SBS. Alat yang digunakan yaitu *Environment Meter Four in One* dan kuesioner SBS. Data penelitian dianalisis dengan uji Mann Whitney, Fisher Exact, dan regresi logistik.

Hasil Penelitian: Hasil analisis menggunakan Mann Whitney menunjukkan bahwa terdapat hubungan kadar formaldehid lingkungan dengan SBS memiliki nilai p=0,007 (p<0,05), hasil analisis menggunakan Fisher Exact menunjukkan terdapat hubungan antara intensitas kebisingan dengan SBS nilai p=0,002 (p<0,05) dan tidak terdapat hubungan intensitas pencahayaan dengan SBS, nilai p=0,394 (p>0,05). Hasil uji regresi logistik menunjukkan intensitas kebisingan adalah faktor yang paling berhubungan dengan SBS dengan nilai p= 0,334.

Kesimpulan: Terdapat hubungan kadar formaldehid lingkungan dan intensitas kebisingan dengan SBS, namun tidak terdapat hubungan intensitas pencahayaan dengan SBS. Intensitas kebisingan adalah faktor yang paling berhubungan dengan SBS.

Kata Kunci: Formaldehid, kebisingan, pencahayaan, SBS.

ABSTRACT

Background: The plywood industry is closely related to the problem of working environment condition that can cause Sick Building Syndrome (SBS) such as headache, dizziness, eye and throat irritation, cough, dry skin, rash, fatigue, and shortness of breath. Workers at CV X plywood company, Kendal District, Central Java complained about SBS. Exposure to risk and hazard of formaldehyde (HCHO) level, the noise intensity, and lighting intensity are known to be factors associated with SBS of workers.

Objective: to determine the relationship of environmental formaldehyde level, noise intensity, and lighting intensity and factor that most related to SBS.

Methode: The type of research was observational quantitative using cross sectional design. The subjects were 31 workers. The independent variables consist of environmental formaldehyde level, noise intensity, and lighting intensity. The dependent variable is SBS. Research measurement tools are Environment Meter Four in One and SBS questionnaire. Research data were analyzed by Mann Whitney, Fisher Exact, and logistic regression.

Result: The result of data analysis use Mann Whitney showed that there was correlation of environmental formaldehyde level with SBS, p value = 0,007 ($p < 0,05$). Result of analysis use Fisher Exact showed there was correlation between noise intensity with SBS p value= 0,002 ($p<0,05$) and there is no correlation between lighting intensity with SBS, p value = 0,394 ($p>0,05$). The result of logistic regression test showed that the noise intensity is the most correlation factor with SBS, p value = 0,334.

Conclusion: There is correlation between formaldehyde environmental level and noise intensity with SBS, but there is no correlation lighting intensity with SBS. The noise intensity is the factor most associated with SBS.

Keyword: Formaldehyde, noise, lighting, SBS