ABSTRAK

ANALISIS PERBEDAAN TEKANAN DARAH DAN DENYUT NADI ANTARA SEBELUM DAN SESUDAH KERJA PADA PEKERJA OPERATOR MESIN YANG TERPAPAR KEBISINGAN MELEBIHI NILAI AMBANG BATAS (NAB) DI UNIT *SPINNING* 3 PT ARGO PANTES TBK TAHUN 2016

Kebisingan merupakan suara atau bunyi yang tidak dikehendaki, kebisingan dapat menyebabkan gangguan baik *auditory effect* maupun *non auditory effect* bagi siapa saja yang kerja pada lingkungan kerja yang bising tersebut. Tujuan penelitian ini untuk menganalisis perbedaan tekanan darah dan denyut nadi antara sebelum dan sesudah kerja pada pekerja operator mesin yang terpapar kebisingan melebihi Nilai Ambang Batas (NAB) di unit *spinning* 3 PT Argo Pantes Tbk Tahun 2016. Jenis penelitian yang digunakan adalah deskriptif analitik dengan pendekatan *cross sectional study*. Pengumpulan data dilakukan dengan cara mengambil data primer dan data sekunder. Sampel pada penelitian ini adalah pekerja operator mesin yang terpapar kebisingan melebihi Nilai Ambang Batas (NAB) di unit *spinning* 3 PT Argo Pantes Tbk sebanyak 154 orang, cara pengambilan sampel dilakukan dengan menggunakan metode *proportional random sampling*. Analisis data dilakukan dengan menggunakan analisis univariat yaitu distribusi frekuensi dan presentase tunggal terkait dan analisis bivariat berupa uji Wilcoxon yang digunakan untuk melihat perbedaan variabel dependen antara sebelum dan sesudah kerja. Hasil uji statistik menunjukkan bahwa ada perbedaan tekanan darah sistolik antara sebelum dan sesudah kerja $p=0,000$ ($p < 0,05$), ada perbedaan tekanan darah diastolik antara sebelum dan sesudah kerja $p=0,000$ ($p < 0,05$), ada perbedaan denyut nadi antara sebelum dan sesudah kerja $p=0,000$ ($p < 0,05$). Penelitian ini menyimpulkan bahwa ada perbedaan tekanan darah sistolik, tekanan darah diastolik dan denyut nadi antara sebelum dan sesudah kerja. Saran yang perlu dilakukan adalah pemberian Alat Pelindung Telinga (APT) secara menyeluruh kepada pekerja, pemantauan dan pengukuran intensitas bising, tekanan darah dan denyut nadi secara rutin dan berkala, sosialisasi kepada pekerja mengenai dampak kebisingan, rambu-rambu mengenai kewajiban pemakaian APT, sanksi yang tegas bagi pekerja yang tidak memakai APT, serta pengawasan K3L terutama dalam hal pemakaian APT.

Kata Kunci: Kebisingan, *Non Auditory Effect*, Tekanan Darah, Denyut Nadi

ABSTRACT

DIFFERENCE ANALYSIS OF BLOOD PRESSURE AND PULSE RATE BETWEEN BEFORE AND AFTER WORK ON THE MACHINE OPERATOR WORKERS WHO EXPOSED TO NOISE EXCEEDS THE THRESHOLD LIMIT VALUE (TLV) IN THE SPINNING UNIT 3 PT ARGO PANTES TBK 2016

Noise is voice or unwanted sound, noise cause either auditory effect or non auditory effect for anyone who work on the working environment of the noisy. The purpose of this research was to analyze the differences in blood pressure and pulse rate between before and after work on machine operator workers who exposed to noise exceeds the Threshold Limit Value (TLV) in the spinning unit 3 PT Argo Pantes Tbk 2016. The kind of research that is used is analitic deskriptive by approach cross sectional study. Data collection is done by means of taking data primary and secondary data. Samples in this research are machine operators worker exposed to noise exceeds the Threshold Limit Value (TLV) in the spinning unit 3 PT Argo Pantes Tbk as many as 154 people, manner of the sample collection done by using proportional random sampling method. Data analysis was conducted using univariate analysis namely a frequency distribution and percentage of associated single and bivariate analysis the Wilcoxon test was used to see the difference between the dependent variable before and after work. The result of the test statistics show there is differences in systolic blood pressure between before and after work by the value of p=0,000 (p < 0,05), there is differences diastolic blood pressure between before and after work by the value of p=0,000 (p < 0,05) and there is differences in pulse rate between before and after work by the value of p=0,000 (p < 0,05). The study concluded that there are differences in systolic blood pressure, diastolic blood pressure and pulse rate between before and after work. Suggestions that needs to be done is giving Hearing Protection Devices (HPDs) thoroughly to workers, monitoring and measuring the intensity of noise, blood pressure and pulse rate regularly and periodically, dissemination to the workers about the impact of noise, signs regarding the obligation of the use of HPDs, strict sanctions for workers not using HPDs, and supervison OHSE especially in terms of the use of HPDs.

Keywords: Noise, Non Auditory Effect, Blood Pressure, Pulse Rate