

HUBUNGAN INTENSITAS KEBISINGAN TERHADAP GANGGUAN NON INDERA  
PENDENGARAN TENAGA KERJA SEBELUM DAN SESUDAH BEKERJA DI BAGIAN  
SAND BLASTING pt. SAI APPAREL INDUSTRIES SEMARANG

INDRA -- E2A204030  
(2006 - Skripsi)

Kebisingan di lingkungan kerja fisik dapat menyebabkan gangguan non indera pendengaran pada tenaga kerja seperti meningkatnya tekanan darah, denyut nadi dan gangguan *masking effect*. Tujuan dari penelitian ini adalah untuk mengetahui hubungan intensitas kebisingan terhadap gangguan non indera pendengaran tenaga kerja sebelum dan sesudah terpapar bising. Metode penelitian ini adalah penelitian *Explanatory* dengan pendekatan *cross sectional*. Pengambilan data dilakukan dengan cara langsung mengukur kebisingan, tekanan darah dan denyut nadi serta menggunakan kuesioner untuk mengetahui gangguan *masking effect*. Populasi dalam penelitian ini adalah tenaga kerja wanita shift pagi yang bekerja di bagian sand blasting berjumlah 156 orang, sampel yang diambil adalah 60 orang dengan menggunakan teknik sampling. Hasil penelitian diperoleh rata-rata tekanan darah sistole sebelum terpapar bising 106,83 diastole sebelum terpapar bising 111,67 mmHg, dan nilai rata-rata tekanan darah diastole sebelum terpapar bising 72,17 mmHg, sesudah terpapar bising 75,83 mmHg. Untuk denyut nadi nilai rata-rata sebelum terpapar bising 74,00 denyut per menit dan sesudah terpapar bising 78,73 denyut per menit. Untuk gangguan *masking effect*, mendengar tapi tidak jelas yang jawab ya (26,7 %) yang jawab tidak (73,3 %) dan yang mendengar jelas menjawab ya (80%) yang jawab tidak (20%) Dari uji statistik dengan menggunakan uji t dengan tingkat kesehatan 5% (0,05) diperoleh tekanan darah sistol dan denyut nadi sebelum dan sesudah terpapar bising nilai  $P < 0,000 < 0,05$ , ini berarti ada hubungan yang bermakna tekanan darah sistol dan sesudah terpapar bising. Intensitas kebisingan di bagian sand blasting mencapai 96,8 dBA, nilai ini melebihi Nilai Ambang Batas Keputusan Menaker No.KEP 51/MEN/1999 Tantang Faktor Fising di Lingkungan Kerja. Terdapat hubungan yang bermakna antara tekanan darah serta denyut nadi sebelum dan sesudah terpapar bising dengan  $P < 0,000 < 0,05$ . Sedangkan untuk gangguan *masking effect*, mendengartapi tidak jelas (berulang-ulang) 26,70 % dan yang mendengar dengan jelas 80 %.

**Kata Kunci:** Intensitas Kebisingan, Gangguan Non Indera Pendengaran

RELATION BETWEEN NOISE INTENSITY AND NON HEARING DISTURBANCE OF WORKERS BEFORE AND AFTER WORKING IN PART OF SAND BLASTING PT. SAI APPAREL INDUSTRIES SEMARANG

*Noise in work place causes non hearing disturbance of workers such as the increasing of blood pressure, pulse and masking effect disturbance. The purpose of this research is to analyze the relation of noise intensity to non hearing disturbance of workers before and after exposed by noise. The method of this research is Explanatory research with cross sectional approach. Data collected taken directly by measuring the noise, blood pressure and pulse and also using the quisioner in order to know the masking affect disturbace. Population of this research are women workers of morning shift who work in part of sand blasting section that amount to 156 women, 60 women collected taken directly by measuring the nise, blood pressure and pulse and also using the quisioner in order to know the masking affect disturbace . Population of this reseach are women workers of morning shift who work in part of sand blasting section that amount to 156 women, 60 women collected with tecnical sampling. Theresult of this research is the average of a sistole blood pressure before exposed by noise is 106,83 mmHg, after exposed by noise is 111,67 mmHg, and the average value of sistole blood pressure before exposed by noise 72,17 mmHg, after exposed by noise 75,83 mmHg. For pulse, the average value before exposed by noise is 74,00 beat each minute and after exposed by noise is 78,73 beat each minute. For masking effect disturbence, the respondents that answer yes in could hearing baut not clear (26,7%), that answer no is (73,3%) and the respondents that answer yes in hearing clearly (80%), who said no (20%). From the statistical test using trial t at 5% (0,05) mistake level is get sistole blood pressure and pulse before and after exposed by noise  $p < 0,000 < 0,05$ , this means there is significant relation between sistole diastol blood pressure before and after exposed by noise. A noise intensity in part of sand blasting to seize at 96,8 dBA, this value is over limited treshold value (NAB) Keputusan Menaker No.KEP 51/MEN/1999 about Physical Factor in Working Environment. There is a significant relation between blood pressure and pulse before and after exposed by with  $p < 0,005$ . Meanwhile, for masking effect disturbace, hear but not clearly (repeatly) 26,70% and who could hearing clearly 80%.*

*Keyword: Intensity of Noise, Non Hearing Disturbance*