

ABSTRACT**“NOISE POTENCY AT THE SCHOOL AS THE CAUSE OF NOISE
INDUCED HEARING LOSS”**

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Noise-Induced Hearing Loss is one type of hearing loss which is caused by the prolong and loud exposure of noise and usually occurred at the workplace. This mostly happened in the developing country with a bad hearing protection.. Based on “WHO *Multi Center Study*” research done in 1998, Indonesia is one of four countries in Southeast Asia with high prevalency of hearing loss (4,6%). According to the Vision and Hearing Survey done in 1994-1996 resulted in high morbidity for hearing problems, and had a high occurrence on the school age (7-18 years old). Students of vocational school majoring in Mechanical Light Vehicle who work using experimental machinery exposed to noise most of the time. Up to now there is no complete data stating incidence of hearing loss among the students of Vocational School 5 Surabaya majoring in Mechanical Light Vehicle due to the noise their working tools make in the laboratory of their school, therefore the researcher want to know the extent of noise exposure affecting their hearing.

This study is an observational descriptive study which observe the source of noise, noise intensity, and duration. The method used in this study is collecting data through measurements with the Sound Level Meter, audiogram record, and direct observation. Samples were taken using total sampling.

There are 163 students included to the sample. All sample sex are male. There are 42 students with normal hearing and 53 students of class X who

suffered hearing loss on the right ear, with the ratio of the number of students who have normal hearing and hearing loss 7 : 9. For the left ear, the number of students with normal hearing, hearing loss, as well as the ratio is also the same. While the students of class XII, there are six students with normal hearing, and 62 students suffered hearing loss, with a 1:10 ratio. For the left ear, there are nine students with normal hearing, and 59 people students who suffered hearing loss, with a ratio of 1 : 6.

For further research, it is advisable to add more examination, such as inspection of noise frequency. The addition of the inclusion and exclusion criteria are also conducted in order to make the study more meaningful and representative.

Key words : Noise Induced Hearing Loss, noise intensity