ABSTRACT

Dental laboratory is a laboratory for produced dentures. In production process, dental laboratory workers are exposed to various hazards both chemical and physical hazards. One of the physical dangers is mechanical vibration. Grinder vibration is used during labor for more than 4 hours or even 8 hours a day, so it is possible to cause health disorder in physic, physiology and performance. Therefore, prevention is needed to reduce complaints that may arise on the workers. This research aims at studying the incidence of subjective health complaints (hand arm vibration syndrome) due to dental grinder vibration on dental laboratory workers in Abadi Dental Laboratory Surabaya.

This research was a descriptive observational research in which the data were taken using cross sectional approach. The subject of the research was 18 laboratory workers, drawn from the total population. Variables in the research were individual characteristics (age, sex, work hour and work duration), the intensity of grinder vibration exposure, and subjective complaints.

The result of the subjective complaints (hand arm vibration syndrome) of the dental laboratory workers in Abadi Dental Laboratory showed that from 18 person, there were 13 person (72%) who had a subjective complaints. The factors which related to subjective complaints were age (p=0,002) and worked duration (p=0,002). Unrelated factors of subjective complaints were sex (p=0,278) and work hour (p=0,114).

It is recommended to do stretching for 5 minutes in every 30 minutes during the use of grinder machine, reducing an overtime work, and treating the grinder machine.

Keywords: subjective complaints (hand arm vibration syndrome), Dental laboratory, and grinder vibration exposure