ABSTRACT

Yulianti, Kristiana.2023. Analysis of Musculoskeletal Disorders (MSDs) Risk Factors in Workers at the Sanan Malang Tempe Chips Industry Center, Poltekkes Kemenkes Malang Occupational Health and Safety Study Program. Preceptor 1: Fresvian Jenrivo, S.KM.,.M.Kes, Preceptor 2: Ani Asriani Basri, M.KKK.email : kristiana_p17451204002@poltekkes-malang.ac.id

Background: Informal industries in Indonesia still use labor instead of existing technology. One of the informal industries in Indonesia is the chips industry. Workers in the informal tempe chips industry in the production process have different work activities and work durations. The aim of this research is to analyze risk factors for Musculoskeletal Disorders. **Research Methods:** This research method is quantitative with a purposive sampling technique on 33 workers using Fisher's Exact Test analysis with SPSS 26. The research instruments are, Nordic Body Map (NBM), stopwatch, and Rapid Upper Limb Assessment (RULA). **Results:** Based on analysis using the RULA method, it was found that the average worker had a moderate level of work posture risk. The results of the analysis using the NBM method showed complaints in the upper neck, lower neck, left shoulder, right shoulder, back, right upper arm and waist. Based on observations made, the average worker has a long working duration. Based on the results of the analysis, the significance value of work posture with Musculoskeletal Disorders was 0.021 < 0.05 and the significance value of work duration with Musculoskeletal Disorders complaints was 0.021 < 0.05. Based on the results of gender analysis with MSDs on the body, the significance value for the lower neck was 0.035 < 0.05 and the significance value for the right elbow was 0.026 < 0.05. Work posture factors and work duration have a significant relationship with Musculoskeletal Disorders. Gender with MSDs in the lower neck and gender with MSDs in the right elbow had a significant relationship. **Conclusion:** Any work activity with a work posture that is not ergonomic, for a long duration, triggers the occurrence of Musculoskeletal Disorders. Gender differences are also a factor in Musculoskeletal Disorders.

Keywords: risk factors, Musculoskeletal Disorders