

## ABSTRACT

Porters, who lift, bring, and put down loads by themselves without the help of any machines are most likely to have musculoskeletal disorders because of the excessive weights of loads they lift and lifting it the wrong way (wrong position of lifting.) This research aims to determine the value of Lifting Index (LI) and weights of loads as well as to determine the relationship between LI and weights of loads on the musculoskeletal disorder of porters in Perusahaan Pelayaran Rakyat PT. Bumi Seruyan Indah Perkasa Gresik.

This research uses analytical method and cross-sectional study. The data retrievals are based on observations, measurements, interviews, and literature studies. To find out the relationship between the values of the Lifting Index and the weight of loads, This research use statistical test of Pearson Product Moment correlation.

The Pearson correlation coefficient of Lifting Index and musculoskeletal disorder is 0.656 with p-value = 0.003 and  $\alpha = 0.05$  which means, there is obviously a significant relationship between musculoskeletal disorder and weights of loads on porters in Perusahaan Pelayaran Rakyat PT. Bumi Seruyan Indah Gresik. The Pearson correlation coefficient of weights of loads and musculoskeletal disorder is 0.538 with p-value = 0.021 and  $\alpha = 0,05$  which also means there is a significant relationship between musculoskeletal disorder and weights of loads on porters in Perusahaan Pelayaran Rakyat PT. Bumi Seruyan Perkasa Indah Gresik.

The conclusion of this research is there is an obvious relationship between Lifting Index and weights of loads on musculoskeletal disorders of porters in Perusahaan Pelayaran Rakyat PT. Bumi Seruyan Indah Perkasa Gresik, and the result correlation is a positive correlation which implies: the higher the value of LI and the heavier weights of loads will definitely increase the risk of musculoskeletal disorder.

Keywords: Lifting Index, Weights of Loads, Musculoskeletal Disorder