

ABSTRACT

The Effect of Sitting Position and Sitting Duration on Low Back Pain in Employees at the Malang City Regional Disaster Management Agency.

Adam Bintang Hidayatullah; Advisor 1: Fresvian Jenrivo, S.KM, M.Kes, Advisor 2: Ani Asriani Basri, SKM, M.KKK. Poltekkes Kemenkes Malang, Occupational Safety and Health Study Program.
email : adam_p17451204001@poltkkes-malang.ac.id

Background: prolonged sitting with a static position and improper posture can cause low back pain. This study aims to assess the effect of sitting position and sitting duration on low back pain in employees of the Malang City Regional Disaster Management Agency in 2024. **Methods:** quantitative analytic observational with a cross-sectional survey approach and samples were taken by purposive sampling. Data analysis used logistic regression correlation test to determine the effect of sitting position and duration on low back pain. **Results:** showed analysis with the Rapid Entire Body Assessment method, 16 respondents (44.4%) were at high risk and 20 respondents (55.6%) were at moderate risk of experiencing low back pain due to sitting position. Observation shows 17 respondents (47.2%) have a long sitting duration (> 4 hours) during working hours, while 19 respondents (52.8%) have a medium sitting duration (> 2-4 hours). Analysis using the Nordic Body Map (NBM) method revealed 20 respondents (55.6%) in the frequent, very frequent category and 16 respondents (44.4%) in the never and occasional category experiencing low back pain. Logistic regression test shows that sitting position has a significant effect on low back pain with a p-value of 0.031 (<0.05) and sitting duration has a significant effect with a p-value of 0.011 (<0.05). Multivariate test results with logistic regression showed that sitting position and sitting duration simultaneously had a significant effect on low back pain with a model significance value of 0.000 and a significant value of walt for sitting position and duration <0.05. **Conclusion:** This study confirms that sitting position and sitting duration significantly affect the risk of low back pain in employees of the Malang City Regional Disaster Management Agency.

Keywords: sitting position, sitting duration, low back pain