THE RELATIONSHIP BETWEEN SITTING TIME AND LOWER BACK PAIN IN STUDENTS OF 'AISYIYAH UNIVERSITY OF SURAKARTA

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SUMMARY

ABSTRACT : *Low back pain (LBP) is one of the most common musculoskeletal disorders experienced by university students due to academic activities that are mostly performed in prolonged static sitting positions. Continuous sitting without stretching or changing posture may increase pressure on the lumbar region, causing muscle tension, paraspinal muscle fatigue, and triggering low back pain. Students are considered a vulnerable group because most lecture activities, assignments, and digital device usage require long sitting durations.* ***Objective :*** *This study aimed to determine the relationship between sitting duration and low back pain among students at Universitas 'Aisyiyah Surakarta.* ***Method :*** *This study used an observational analytic design with a cross-sectional approach. The sample consisted of 92 respondents selected using purposive sampling according to the inclusion and exclusion criteria. Sitting duration data were collected using a daily sitting duration questionnaire categorized into <4 hours and 4–8 hours per day. The intensity of low back pain was measured using the Numeric Rating Scale (NRS) with moderate to severe pain categories (scores 4–9). Data analysis was performed using the Chi-Square test to determine the relationship between sitting duration and low back pain.* ***Results :*** *The results showed that most students had a sitting duration of 4–8 hours per day and experienced moderate to severe low back pain. Out of 100 respondents, 92 students experienced low back pain complaints with moderate to severe intensity. Statistical analysis demonstrated a significant relationship between sitting duration and low back pain among students at Universitas 'Aisyiyah Surakarta with a p-value <0.05. Students with longer sitting durations had a higher risk of experiencing low back pain compared to those with shorter sitting durations.* ***Conclusion :*** *There is a significant relationship between sitting duration and low back pain among students at Universitas 'Aisyiyah*

Surakarta. The longer the sitting duration, the higher the risk of developing low back pain. Students are encouraged to apply ergonomic sitting positions, perform regular stretching, and reduce sedentary behavior to prevent musculoskeletal disorders.

Keywords : sitting duration, low back pain, students, musculoskeletal, sedentary behavior