

Changes in Pain Intensity of Musculoskeletal Disorders in Flight Attendants after Stretching Exercise Program

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Abstract : Background: Flight attendant (FA) is a job that is often exposed to ergonomic stressors; thus, they are very susceptible to symptoms of musculoskeletal disorders (MSDs). One of the ways to overcome musculoskeletal complaints is by stretching. This study aimed to examine the prevalence of MSDs and the effect of a 2-week stretching exercise program using the Indonesian Ministry of Health's stretching video on changes in musculoskeletal pain intensity in FA on commercial aircraft in Indonesia. Methods: A pre-post study was conducted using Nordic Musculoskeletal Questionnaire (NMQ) for MSDs' identification and Visual Analog Scale (VAS) as pain intensity measurement. Data was collected and then analyzed using SPSS with Wilcoxon test. The change in pain intensity was considered significant if the p value was less than 0.05. Results: The results showed that 92% of the FA (n=75) had MSDs in at least 1 area of the body in the last 12 months. Thirty-four respondents participated as subjects. The complaint level score in 28 body areas before intervention was a median of 34 (29-84), with pain intensity of a median of 6 (2-9) became a median of 32 (28-67) and a median of 3 (0-9) after the intervention, respectively, with p-value <0.001. Conclusion: The stretching exercise program showed significant changes in the complaint level scores in 28 body areas ($p < 0.001$) and pain intensity before and after the stretching exercise intervention ($p < 0.001$).

Keywords : flight attendant, MSDs, Nordic Musculoskeletal Questionnaire, stretching exercise program, visual analog scale

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