

A Cross Sectional Study of the Relationship of Prolonged Standing and Musculoskeletal Symptoms among Sales Personnel (Ateneo and OSHC)

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Abstract

To determine the prevalence of musculoskeletal symptoms and to examine the relationship between exposure to prolonged standing and the reported symptoms of sales personnel in the Philippines

Methodology: A cross-sectional survey, based from the Nordic Musculoskeletal Disorders Questionnaire, was conducted among 197 sales personnel in Metro Manila and Cebu City through an interview-guided approach. Participants included those who have worked for a year or more, without existing musculoskeletal disability and not pregnant. Key informant interviews were also carried out to gather information on the working environment and working population.

Analysis: Univariate analysis was done to get the profile of the respondents and the prevalence of musculoskeletal symptoms. For bivariate analysis, Chi-squared test was used to check the association of prolonged standing and musculoskeletal symptoms in 9 body regions. For multivariate analysis, logistic regressions were done for the significantly associated body parts in bivariate analysis.

Results: Majority of sales personnel experienced prolonged standing, comprising 70% of the sample size. The prevalence of musculoskeletal symptoms was 86% among all respondents. The top five body parts with

musculoskeletal symptoms within the last 12 months were upper back (52%), shoulder (50%), lower back (44%), ankle/feet (43%) and neck (41%). Prolonged standing was significantly associated with upper back and ankles/feet musculoskeletal symptoms. It was also significantly associated with multiple body parts and axial load bearing body parts with musculoskeletal symptoms. For upper back, possible confounders were body mass index (BMI), gender, and *flatfootedness*.

For ankles/feet, a possible confounder was educational attainment. For multiple body parts with symptoms, possible confounders were smoking status, BMI, job title, gender, duration in current nature of work, and *flatfootedness*. Lastly, axial load bearing body parts, possible confounders were smoking status, BMI, job title, gender, duration in current nature of work, and educational attainment.

Conclusion: Prolonged standing was significantly associated with musculoskeletal symptoms. Other factors were also identified as risk factors and associated to the manifestation of symptoms in various body parts. These findings may provide valuable input to the formulation of intervention strategies and work policies.