

【Original Article】

Associations of Low Back Pain, Exercise Habit with Depressive Symptom among Community-dwelling Older Adults

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Abstract

Objective: The present study investigated 1) prevalence of low back pain (LBP) by intensity, 2) the association between LBP intensity and depressive symptom, 3) the joint association of LBP intensity and exercise habit with depressive symptom among community-dwelling older adults.

Methods: The participants were 1,051 men and women aged 65 to 84 years old who were living in Matsudo city, Chiba, Japan. Intensity of LBP, depressive symptom, exercise habit, sociodemographic attributes, lifestyles, and biological variables were obtained by a self-administered questionnaire. The associations of LBP with depressive symptom as well as joint associations of LBP intensity and exercise habit on the odds of being depression were examined using multivariate logistic regressions.

Results: Prevalence of LBP was 47.7% (mild: 35.2%, moderate: 10.0%, severe: 2.5%). After adjusting for potential confounders, mild pain (odd ratio [OR]: 1.85), moderate to severe pain (OR: 2.03) were significantly associated with depressive symptom. There was no significant interaction between LBP intensity and exercise habit on the association with depressive symptom. As a joint association, participants with mild pain (OR: 2.85), with moderate to severe pain (OR: 2.92) with no exercise habit were significantly associated with depressive symptom, compared to pain-free participants having exercise habit.

Conclusion: Almost half of community-dwelling older adults have LBP and one-quarter of them have moderate to severe pain. Participants with more severe pain were more likely to have depressive symptoms, suggesting that reduction of pain can alleviate depressive symptom. Inactive people with LBP have a tendency to show depressive symptom compared to active people.

Key words: community-dwelling older adults, low back pain, exercise habit, depression

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