

**Record: 1**

**Title:** Disorders of breathing and continence have a stronger association with back pain than obesity and physical activity.

**Authors:** Smith MD; Russell A; Hodges PW

**Affiliation:** Division of Physiotherapy, University of Queensland, QLD 4072, Australia

**Source:** Australian Journal of Physiotherapy (AUST J PHYSIOTHER), 2006; 52(1): 11-16. (6p)

**Publication Type:** Journal Article - research, tables/charts

**Language:** English

**Major Subjects:** Back Pain  
Incontinence  
Respiration Disorders  
Women's Health

**Minor Subjects:** Female; Cross Sectional Studies; Self Report; Questionnaires; Australia; Logistic Regression; Body Mass Index -- Evaluation; Physical Activity -- Evaluation; Hypersensitivity; Prospective Studies; Obesity; Odds Ratio; Adult; Middle Age; Aged; Descriptive Statistics; Clinical Assessment Tools; Short Form-36 Health Survey (SF-36); Pain Measurement; Body Weights and Measures; Confidence Intervals; Funding Source; Human

**Abstract:** Although obesity and physical activity have been argued to predict back pain, these factors are also related to incontinence and breathing difficulties. Breathing and continence mechanisms may interfere with the physiology of spinal control, and may provide a link to back pain. The aim of this study was to establish the association between back pain and disorders of continence and respiration in women. We conducted a cross-sectional analysis of self-report, postal survey data from the Australian Longitudinal Study on Women's Health. We used multinomial logistic regression to model four levels of back pain in relation to both the traditional risk factors of body mass index and activity level, and the potential risk factors of incontinence, breathing difficulties, and allergy. A total of 38 050 women were included from three age-cohorts. When incontinence and breathing difficulties were considered, obesity and physical activity were not consistently associated with back pain. In contrast, odds ratios (OR) for often having back pain were higher for women often having incontinence compared to women without incontinence (OR were 2.5, 2.3 and 2.3 for young, mid-age and older women, respectively). Similarly, mid-aged and older women had higher odds of having back pain often when they experienced breathing

difficulties often compared to women with no breathing problems (OR of 2.0 and 1.9, respectively). Unlike obesity and physical activity, disorders of continence and respiration were strongly related to frequent back pain. This relationship may be explained by physiological limitations of co-ordination of postural, respiratory and continence functions of trunk muscles. [Smith MD, Russell A, and Hodges PW (2006): Disorders of breathing and continence have a stronger association with back pain than obesity and physical activity.

**Journal Subset:** Allied Health; Australia & New Zealand; Peer Reviewed

**Instrumentation:** Bodily Pain subscale of the SF-36

**ISSN:** 0004-9514

**MEDLINE Info:** *PMID:* NLM16515418 *NLM UID:* 0370615

**Grant Information:** Commonwealth Department of Health and Ageing and National Health and Medical Research Council Research Grant

**Entry Date:** 20060526

**Revision Date:** 20150820

**Accession Number:** 106444721

**Database:** CINAHL Complete