

and musculoskeletal pain one year later; and 3) to explore influences on expectations.

**Methods** A longitudinal cohort postal survey collected data about musculoskeletal pain and expectations at baseline and one year later among a cohort of workers in New Zealand ( $n = 443$ ). The postal survey was the New Zealand arm of the international CUPID (Cultural and Psychosocial Influences on Disability) study. Data were analysed descriptively and through multi-variable logistic regression. A qualitative study used in-depth interviews to explore influences on expectations among a subset of participants ( $n = 14$ ) with musculoskeletal pain who had taken part in the postal surveys.

**Results** Participants thought their pain could 'possibly,' 'probably' or 'definitely' be a problem in twelve months time for a high proportion of musculoskeletal pain reported in the baseline postal survey (69–88% depending on the anatomical site). Those with poorer expectations were more likely to report musculoskeletal pain at the same anatomical site one year later. Multi-variable logistic regression showed that expectations at baseline were an independent factor associated with the persistence or recurrence of low back pain but not the other sites examined. Qualitative findings suggest that expectations are influenced by a range of factors including healthcare providers, the behaviour of symptoms and people's observations of others.

**Conclusions** A high proportion of participants thought their musculoskeletal pain would be a problem in the future and indeed for many people it was. Expectations appear to be influenced by a range of factors.

#### 86 PREVALENCE OF MUSCULOSKELETAL DISORDERS AMONG DENTAL PERSONNEL IN KHON KAEN PROVINCE, THAILAND

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**Objective** This cross sectional study was conducted to determine the prevalence of musculoskeletal disorders (MSDs) among government dental personnels in Khon Kaen Province of Thailand.

**Methods** There were 282 dental personnels enrolled into this study. Data were collected by interviews with the modified structural questionnaires. Descriptive statistics were used to describe characteristics and inferential statistics were MSDs prevalence and confidence interval (95%CI).

**Results** The results showed that most participants were female (81.9%), the minimum and maximum age were 20 years and 59 years, respectively (mean =  $32.8 \pm 9.4$  years). Most participants had body mass index at normal level ( $18.5 - 22.9 \text{ kg/m}^2$ ) for 55.3%. Most positions were dental nurses (46.4%), dentists (22.0%) and patient assistants (18.1%), respectively.

For the last 7-day and 1 month period the prevalence of MSDs were 61.7% (95% CI = 0.56 - 0.68) and 93.6% (95% CI = 0.91 - 0.96), respectively. The highest prevalence at severe level of pain were found at areas of shoulder (24.6%), lower back (19.3%), and neck (16.7%), respectively. Frequency of MSDs considering everyday occurrence found on areas of shoulder (13.6%), neck (11.7%), lower back (7.6%), respectively. Among 264 MSDs cases of dental personnels, the report of pain impacted to daily activity was 76.1%. The report of work was related-MSDs was 71.2%. Symptoms was occurred at evening

time after work (41.3%). The intake of painkillers or treatment by Thai traditional medicine program was 64.6%.

**Conclusions** The results identified neck-shoulder-back pain among dental personnels by showing the severity and the frequency of pain. Therefore there should be the health surveillance program of neck-shoulder-back pain among dental personnels. This findings are useful for the *prospective cohort study* to find out the risk factors for neck-shoulder-back pain among dental personnels.

#### 87 PREVALENCE AND RISK FACTORS OF LOW BACK PAIN AMONG INFORMAL GARMENT WORKERS IN THE NORTHEAST OF THAILAND

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**Objectives** The cross-sectional analytic study was designed to investigate the prevalence of low back pain (LBP) and risk factors for LBP among informal garment workers.

**Methods** There were 446 garment workers in the Northeast of Thailand who entered into this study. Data was collected by the face-to-face interview with the structured questionnaires. The LBP prevalence was estimated. The associations between LBP and studied factors were identified by the univariate analysis and multiple logistic regression analysis. Risk factors were indicated by adjusted odds ratio ( $OR_{adj}$ ) and 95% confident interval (95% CI) at  $p$ -value  $< 0.05$ .

**Results** Among 446 informal garment workers, most workers were female (94.84%), mean of age was 37.64 years (S. D. = 6.85) and work experience was 10.61 years (S. D. = 7.53). Most workers had the repetitive movement (69.28%, 95% CI = 64.98–73.58) and prolonged sitting of work  $> 8$  hours a day (68.16%, 95% CI = 63.82–72.50). The six month-prevalence of LBP was 44.17% (95% CI = 39.54–48.80). The univariate analysis identified factors of gender, prolonged sitting, no change posture each hour and the repetitive task significantly associated with LBP. The multiple logistic regression analysis indicated that the significantly related factors to LBP were prolonged sitting ( $OR_{adj} = 2.11$ , 95%CI = 1.27–3.50), no change posture each hour ( $OR_{adj} = 1.84$ , 95%CI = 1.11–3.07), repetitive task ( $OR_{adj} = 1.97$ , 95% CI = 1.18–3.30). Factor of male gender was correlated with LBP by protection ( $OR_{adj} = 0.31$ , 95%CI = 0.11–0.89).

**Conclusions** The prevalence of LBP can identify health impact of Thai informal garment workers. The risk factors of LBP consisted of personal, work characteristics, and work behaviours. Therefore, local health care units or administrative organisations should provide occupational health service and the health surveillance program among informal garment workers. The finding risk factors are very useful to apply for prevention of new cases of LBP.

#### 88 THE RELATIONSHIP BETWEEN OCCUPATIONAL STRESS, MUSCULOSKELETAL DISORDERS AND WORK ABSENCES: A COMPARATIVE STUDY BETWEEN ITALIAN AND BRAZILIAN NURSING PERSONNEL

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