

health concern for workers in Asia. Taiwan is the third country in the world after Japan and Korea where national governments announced criteria to recognise overwork-related CVDs. However, the public's worries persisted, as the criteria seemed unable to solve the problem of long working hours in these countries. In the December 2016 and early 2017, a series of regulatory changes in Taiwan has received significant attentions, triggered by increasing social criticism indicating that Taiwanese regulations lagged behind international labour standards and many highly industrialised countries. As a result, increases in research addressing overwork-related CVDs issues and in the reported CVD cases could be a good reflection of the national policy change. We first compared the trends of research focus in Taiwan with those in Japan and Korea, respectively. We further collected 10 year data for Taiwan and Japan to investigate the impact of introducing a new policy. We found consistent and plausible correlations between the implementation of new policy and the number of recognised overwork-related CVDs. On the other hand, our results of Taiwan suggested a systematic problem of under-recognition of occupational diseases. Although the industrial development contributed to the country's economic growth substantially, the country will need to keep bearing the underlying burden of overwork-related CVDs.

Oral Presentation

Injuries

0085 INJURY REPORTING, EMPLOYER LODGEMENT AND COMPENSATION PAYMENT DELAYS AND DURATION OF WAGE REPLACEMENT IN INJURED WORKERS

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Objective To determine if delays in the workers' compensation process, indicated by failures in claim filing, adjudication and provision of wage replacement (WR), are associated with poorer RTW outcomes.

Methods This study examined standard workers' compensation claims with an injury date between January 2007 and December 2012, with at least one-day of WR, and which were not terminated for reasons other than RTW within the first 12 months of the claim (n=80,322). Logistic regression models explored the association between: i) delays in the injured workers (IWs) claim lodgement, the IWs employer's lodgement of the claim with the insurer, and receipt of first compensation payment, and accumulating 52 weeks of WR; and ii) socio-demographic/economic, occupational, and injury-related factors and the aforementioned delays.

Results All delays were associated with increased odds of reaching 52 weeks of WR. The more delays, the greater odds of a long-term claim. Different factors were associated with each different delay.

Conclusions The predictive ability of delays in claim lodgement and processing and receipt of compensation payments demonstrate where improved claims management and adjudication could reduce the proportion of workers on long term WR.

Oral Presentation

Shift Work

0086 SHIFTWORK, CIRCADIAN DISRUPTION AND BREAST CANCER: A FIRST APPLICATION OF THE CHRONOBIOLOGICAL THEORY AND PRACTICAL CHALLENGES WITHIN THE AUSTRALIAN BCEE STUDY

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Background In 2007, the International Agency for Research on Cancer [IARC] classified shiftwork involving circadian disruption [CD] as probably carcinogenic to humans. We hypothesised that CD occurs if individuals work during their preferred sleep time (i.e. their biological nights).

Objective We intended to refine the measure of exposure to shiftwork involving CD within the Breast Cancer, Environment and Employment Study (BCEES).

Methods For each participant, we classified jobs with regard to whether their work times overlapped with their individual biological night. Preferred sleep times were obtained through the first two questions of the Horne-Östberg morningness-eveningness questionnaire [MEQ] ("perfect day" approach Groß et al., *Medical Hypotheses*2017).

Results Re-classifications were confined to shifts which include work - in part or in full - between midnight and 7 am. Circadian disruption was defined as an overlap of the preferred sleep time and the assessed shift times (+2 hours e.g. for travelling). We found a small, non-statistically significant association between shiftwork involving CD and breast cancer risk not different from prior results (Fritschi et al., *British Journal of Cancer*2013). Assessment of total CD was limited as numbers of chronodisrupted shifts associated with work between 0000–0700 and working times such as 0800–1600 or 1400–2200 could not be assessed.

Conclusions Whether accumulated CD doses due to variable work times during variable individual biological nights are carcinogenic must remain open at this stage. To provide interpretable answers, information on all shifts during the working life with potential CD for individuals with different biological nights must be considered.

Oral Presentation

Policy/Impact

0087 THE IMPACT ON LABOUR MARKET AFFILIATION OF CHANGES IN SICKNESS ABSENCE BENEFIT LEGISLATION USING A NEWLY DEVELOPED DANISH REGISTER ON SALARY AND SOCIAL PAYMENTS, 2010–2014

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Objectives January 2012 the Danish law on sickness absence benefit was regulated in terms of the employer period. The