

amongst employees in a large acute Hospital setting. The diversity of programme attendees is contributing to shared learning and networking across boundaries. By tapping into internal expertise and developing internal capacity to deliver the programme we have created a cost effective, sustainable model that is directly transferable to the wider health care setting.

474 PROJECT HAPPINESS AND WELLBEING FOR INDIANOIL

Sandeep Sharma*, SK Awasthi. *Indian Oil Corporation Ltd, New Delhi, India*

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Introduction The measures for enhancing ‘Wellbeing’ are complement to HSE measures to make sure that all workers are safe, healthy, contended and are effectively engaged at work. In fact, Happiness and Wellbeing of the workforce is a key factor in any organisation’s long-term effectiveness.

Materials and methods IndianOil Corporation has taken Happiness for their employees as a project and under this Project weekly questionnaire were started along with small reading material on various parameters which are the factors controlling our state of mind and ultimately effecting the one’s Happiness and Overall Well Being, Mental Attitude and Outlook, Time Management, Recognising and Managing Common Thinking Errors, Personal Wellbeing, Self Esteem and Self Confidence, Relationships for Health and Happiness, Positive and Negative Emotions, Burnout Factors in Your Work life, Health Fitness and Healthy Habits, Anger Management, Your Communication Style, Positive attitude and Gratitude. Project on ‘Happiness and wellbeing’ in IndianOil focuses on the psychological aspects of a fulfilling and flourishing life and provides practical guidelines to enhance Happiness and Wellbeing. IndianOil also launched a book prepared by Corporate HSE on ‘Happiness and Wellbeing.

Result In response to the weekly questionnaire on Happiness and Wellbeing, we received an overwhelming response and willingness from employees to join the Project Happiness and Well Being, which helped IndianOil employees to understand fundamental issues in happiness and well-being, thereby making their official and personal life more meaningful, safe and effective. This program provides an insight into their mindsets and mental models that underlie their everyday behaviour and experience of life.

Discussion Project Happiness and Wellbeing brought more happiness in our management style, Smile and look happy when you are at work, cultivate optimism; convey calm and faith in the future, in this way we create a much more efficient and adaptable organisation.

491 ESTIMATING THE NUMBER OF OPIATE OVERDOSES RELATED TO OCCUPATIONAL INJURIES IN THE UNITED STATES, 2011–2015

^{1,2}Devan Hawkins*, ¹Kevin Schott, ³Patricia MacCulloch, ¹Laura Punnett, ¹David Kriebel. ¹Department of Public Health, University of Massachusetts Lowell, Massachusetts, USA; ²Massachusetts Department of Public Health, Boston, Massachusetts, USA; ³School of Nursing, University of Massachusetts Lowell, Lowell, Massachusetts, USA

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Introduction The incidence of fatal opiate overdose in the United States has drastically increased over the past two

decades, resulting in significant attention from the public health and medical communities. Intervention efforts to reduce overdose mortality have primarily focused on regulating prescriptive practices and the dissemination of naloxone with less focus given to primary prevention. Preventing occupational injuries is one area where primary prevention is possible. In order to understand the potential impact of such prevention, this study sought to estimate the number of U.S. opiate overdose deaths from 2011 through 2015 attributable to occupational injuries.

Methods The number of reported occupational injuries occurring in the United States was obtained from the U.S. Bureau of Labour Statistics’ Survey of Occupational Injuries and Illnesses from 2011 to 2015. A literature review was conducted to obtain estimates of the probability of being prescribed an opiate after any occupational injury, the probability of being prescribed an opiate after a low back injury, and the probability of overdose mortality following an opiate prescription. These estimates were then combined to obtain an estimate of how many opiate overdose deaths would be expected for the numbers of occupational injuries recorded in 2011–2015. Monte Carlo simulations were used to model the uncertainty in these estimates.

Results It was estimated that 718 (95% Confidence Interval: 667 to 775) opiate overdose deaths attributable to all occupational injuries occurred from 2011 to 2015. This risk of mortality was estimated to be 30% higher for the sub-group with low back injuries.

Conclusion The primary prevention of occupational injury holds great promise to reduce the devastating personal and economic impact of opiate overdoses. Further research is recommended to provide additional evidence highlighting the pathway from various types of occupational injury to opiate overdoses.

493 HEALTHY ENTERPRISE STANDARD (HES) EVALUATION: IMPACT ON LIFESTYLE HABITS AND SELF-RATED HEALTH

^{1,2}D Bellemare*, ²C Duchaine, ³M Vézina, ³M-M Mantha-Bélisle, ⁴H Sultan-Taieb, ⁵F St-Hilaire, ^{1,2}C Brisson. ¹Faculty of Medicine, Laval University, Quebec City, Canada; ²CHU de Québec Research Centre, Population Health and Optimal Health Practices Unit, Quebec City, Canada; ³Institut national de santé publique du Québec (INSPQ), Quebec City, Canada; ⁴Université du Québec à Montréal, Montreal, Canada; ⁵Management School, University of Sherbrooke, Sherbrooke, Canada

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Introduction A significant portion of the burden of illness of workers in Canada and the United States is attributable to poor lifestyle habits, namely smoking, physical inactivity and low consumption of fruits and vegetables. The *Healthy Enterprise Standard* (HES) targets four intervention areas, including one to promote healthy lifestyle habits. The aim of this study was to evaluate the impact of HES implementation on workers’ smoking behaviour, physical activity, consumption of fruits and vegetables as well as their self-rated health status.

Methods This was an intervention study with a before-after design derived from secondary data. Organisations adopted the standard of their own initiative and were responsible for implementing interventions. All active employees of ten Quebec organisations were solicited to participate before (T1=2849) and 24–38 months (T2=2560) following the standard’s implementation. Smoking status, weekly frequency of physical activity and daily fruit and vegetable consumption

were evaluated at T1 and T2 using self-report items elaborated from a national survey. Self-rated health status was assessed at both time points using one validated self-report item. Intervention exposure was measured by questionnaire and complemented by qualitative analyses.

Result Between T1 and T2, the prevalence of weekly physical activity frequency increased for men and the prevalence of ex-smokers increased for both men and workers aged 55 or older. When body mass index was taken into account, the prevalence of daily fruit and vegetable consumption also increased for both men and workers aged 55 or older. However, these workers' self-reported health status remained unchanged from T1 to T2. No clear changes were observed in other age groups.

Discussion The improvement of lifestyle habits for both male workers and those aged 55 or older following HES interventions is significant since scientific literature suggests that those groups are generally less inclined to participate in health promotion workplace interventions.

505 WHAT ARE GOOD JOBS? A EUROPEAN PEROSH PERSPECTIVE

¹David Fishwick*, ¹Edward Robinson, ²Noortje Wiezer, ³Zofia Mockalo, ⁴Vincent Grosjean, ⁵Lars L Andersen. ¹Centre for Workplace Health, HSE, Buxton, Derbyshire, UK; ²TNO, Leiden, Netherlands; ³CIOP, Warsaw, Poland; ⁴Département Homme au Travail, INRS, France; ⁵National Research Centre for the Working Environment, Copenhagen, Denmark

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Introduction PEROSH stands for the Partnership for European Research in Occupational Safety and Health. The work of this group relates to developing a European perspective concerning wellbeing, and importantly organising worker wellbeing conferences. Our most recent conference developed a 'Good Jobs' theme.

Methods Wellbeing experts participated in a knowledge café event, rotating between three semi-structured discussions relating to:

- i. what makes a good job,
- ii. roles of leadership and
- iii. good jobs in harsh economic times.

Results *What makes a good job*; individual factors including autonomy, support, recognition, development through workplace learning programmes, optimum work-life balance, adaptation to different working life phases, adequate financial rewards and the ability to focus on primary task were identified as important. The nature of the work was felt important to result in engagement and challenge, be safe and inclusive, and both be meaningful and personally flexible.

Leadership roles; associated with good jobs included the ability to creatively motivate and engage workers, provide social support, coaching, mentoring and empathy, and foster a good balance between shareholder and stakeholder requirements. Participation, instead of command and control, appeared key, as did recognition and management of interpersonal conflicts at work. Leaders were favoured who allowed autonomy, facilitated development and progress, and were seen as role models.

Good jobs in harsh economic times; were identified to require many individual attributes centred around purposeful individual rewards, work attributes that considered issues that did not cost money to improve (e.g. better communication

around change), and work site attributes centred around investing in people as important resources and innovative labour relations.

Discussion PEROSH has successfully developed a view relating to what constitutes a good job. It is hoped that the output from this process will help shape the future workplace and employment policies of each of the represented European countries.

511 WORKPLACE BULLYING AND METABOLIC SYNDROME AMONG PRIVATE SECTOR WORKFORCE IN MALAYSIA

¹VYW Lai, ¹AT Su, ²M Isahak, ²VCW Hoe, ³SSM Kwan, ⁴A Darus, ⁵K Tsuno. ¹Universiti Malaysia Sarawak, Kota Samarahan, Malaysia; ²University of Malaya, Kuala Lumpur, Malaysia; ³University Malaysia Sabah, Kota Kinabalu, Malaysia; ⁴Social Security Organisation of Malaysia (SOCISO), Kuala Lumpur, Malaysia; ⁵Wakayama Medical University, Wakayama, Japan

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Introduction Workplace bullying is increasingly recognised as a serious public health issue in the workplace because of its increasing prevalence worldwide and negative health impacts on employee's health. The consequences vary from stress and depression to psychosomatic problems including cardiovascular diseases. The objective of this study is to determine the prevalence of workplace bullying and its association with metabolic syndrome among private industry workers in Malaysia.

Methods Workers undergoing Health Screening Program (HSP) by Social Security Organisation Malaysia in a private health-care laboratory throughout Malaysia were recruited into the study. The targeted sample size was 1580 participants throughout the country. Workplace bullying was measured using Modified Negative Acts Questionnaire and Malaysian Workplace Bullying Index. Data collected from the HSP was analysed to determine the presence of metabolic syndrome. The relationship between the presence of workplace bullying and metabolic syndrome was analysed using SPSS software.

Results Preliminary results showed most of the respondents experienced more on workrelated bullying than person-related bullying. Age and waist circumference were significantly associated with workplace bullying. There was no significant association between workplace bullying and other parameters of metabolic syndrome. Data collection is still in progress and will be completed by February 2018.

Conclusion The prevalence of workplace bullying is related to age and possible obesity. Its association with metabolic syndrome is inconclusive for the time being.

519 INFLUENCE OF WORK ORGANISATION AND ENVIRONMENT ON HEALTH BEHAVIOURS OF CONSTRUCTION APPRENTICES

^{1,2}BA Evanoff*, ^{2,3}D Rohlman, ^{1,2}JR Strickland, ^{2,3}KM Kelly, ^{1,2}AM Dale. ¹Division of General Medical Sciences, Washington University School of Medicine in St. Louis, St. Louis, MO, USA; ²Healthier Workforce Centre of the Midwest, Iowa City, IA, USA; ³College of Public Health, University of Iowa, Iowa City, IA, USA

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Introduction Construction is among the most dangerous industries with well-recognised high physical demands and low job autonomy. In addition to traditional hazards for workplace injury and illness, other threats to health and well-being occur