Good work is good for health and wellbeing

Comcare’s work is centered on the ever increasing evidence that good work, in general, is good for health and wellbeing. Particularly that participation in work as part of recovery is good for people.

The emerging evidence alert

This Emerging Evidence Alert includes the latest news and evidence on the health benefits of work, recovery and return to work, as well as a WHS issues to keep people healthy and safe in work.

We encourage employers to share their approaches and good practice in the emerging evidence alert. One of the objectives of this alert is to promote and share information and practical responses to the issues involved in this field. We value your input.

This month we alert you to the Boyer lectures, http://www.abc.net.au/radionational/programs/boyerlectures/ starting on September the 3rd and presented by Professor Sir Michael Marmot. His Whitehall studies on social determinants of work http://www.ucl.ac.uk/whitehallII/ underpins the work of Comcare’s Health Benefits of Work programme.

Importantly the Comcare Conference is nearly here. It will be held on 13-14 September 2016 at the National Conference Centre in Canberra. Please see our website for further information. http://www.comcare.gov.au/conference

This biennial event brings together delegates from across Australia to focus on key issues of workplace health and safety including the health benefits of work, recovery and return to work which is also the focus of the Emerging evidence alert .

This year’s theme for the conference is Shaping the future through partnerships and participation.

The international keynote speaker will be Professor Sir Mansel Aylward. His research focuses on identifying barriers and obstacles to recovery from illness and return to optimal functioning and wellbeing; developing and evaluating interventions which assist this process and assessing influences which may predispose to longer term illness and disability.

Some of his research is listed below.

Title
Overcoming barriers to recovery and return to work: towards behavioral and cultural change

Author/s
Aylward, Mansel 119-139

Source
In Handbook of return to work: from research to practice Volume 1 Schultz, I Z Gatchel, RJ (Eds.) Boston MA Springer 2016 119-139

Abstract
Biopsychosocial factors play a fundamental role in the presentation of illness, recovery, and probability of return to and retention in work. Interventions at the level of the individual based on cognitive and behavioral methods and which also address sociocultural factors substantially facilitate return to work for injured workers and those who have health-related problems. Conceptual models of disability and illness are explored which crystallize thinking, improve understanding and facilitate the development of new interventions. There are major implications for health care, workplace management, and social policy. The case is also advanced for all in society to share a more realistic, more balanced and more human model of disability. New knowledge is presented on the relationship between work and health that explains why work is generally good for health and well-being.
Title: The return to work discussion a qualitative study of the line manager conversation about return to work and the development of an educational programme

Author/s: Cohen D, Allen J, Rhydderch M, Aylward M.

Source: Journal of rehabilitation medicine July 2012 44 8 677-83 http://dx.doi.org/10.2340/16501977-0996

Abstract: To investigate the conversation between line manager and employee about return to work to inform the development of an online interactive educational programme for line managers to improve the effectiveness of their discussions. An inductive qualitative approach, using the principles of action research and motivational interviewing were adopted. The results informed the development of the educational programme for line managers.

Middle grade line managers in a large public services employer in the UK.

Four discussion groups were conducted over a period of 8 months. Line managers explored the challenges of the return to work interview, analysed their interactions with employees and constructed the content of an educational programme. Multiple methods were used to build engagement with participants, including video and role-play.

Nine line managers were recruited across 3 business areas. Managers recognised that their conversations focused on the organisations' policies and procedures and the outcome, rather than the interaction. They recognised the strength of shifting style to shared decision-making and guidance rather than process and instruction. These communication strategies were depicted in the educational programme.

The content and flow of the return to work discussion is of high importance and influences employee behaviour and return to work outcomes.

Weblink

Title: Managing long-term worklessness in primary care: a focus group study

Author/s: Cohen, Debbie; Marfell, Naomi; Webb, Katie; Robling, Mike; Aylward, Mansel.

Source: Occupational medicine January 2012 62 1 67-68 2

Abstract: Background Evidence suggests that overall the benefits of work are greater than the harmful effects of long-term unemployment and prolonged sickness absence. General practitioners (GPs) often feel that work and health-related issues extend beyond their role. There is a paucity of research that focuses on GPs’ attitudes to the management of long-term worklessness.

Weblink

Title: Models of sickness and disability applied to common health problems: applied to common health problems

Author/s: Waddell G Aylward, M


Weblink

Title: Prioritising pain in policy making: the need for a whole systems perspective

Author/s: Phillips, Ceri; Main, Chris; Buck, Rhiannon; Aylward, Mansel; Wynne-Jones, Gwenllian; Farr, Angela.
This review aims to bring together current evidence on the impact of chronic pain in terms of its economic costs, cost to healthcare services and benefit agencies, and quality of life, and to discuss the implications of this for government policies. Quantifying the burden and cost of pain is challenging due to its multi-factorial nature and wide reaching effects. Nonetheless, there is a consensus that chronic pain has a significant impact on levels of resources across society and on quality of life. Pain is a complex bio-psychosocial experience and chronic pain is a consequence, in part, of adopting a narrow biomedical treatment approach to a problem which requires a multi-disciplinary approach to address the psychosocial, behavioural and biomedical aspects of pain. Although effective pain management interventions and programmes exist, provision of these services is inconsistent, and chronic pain is not given the priority it requires in view of the extent of its burden on individuals and society. Current relevant government policies in UK are discussed to highlight the need to prioritise pain and adopt a whole-systems approach to its management if governments are to successfully reduce its cost and burden.

**Title**: Beliefs about common health problems and work: a qualitative study  
**Author/s**: Barnes, Maria Carla; Buck, Rhiannon; Williams, Gareth; Webb, Katie; Aylward, Mansel.  
**Source**: Social science & medicine August 2008 67 4 p657-665 DOI: 10.1016/j.socscimed.2008.05.008  
**Abstract**: Common health problems (CHPs) such as pain, depressed mood and fatigue are often cited as causes of disability and incapacity for work. The aim of this qualitative study was to investigate beliefs about CHPs in relation to work. Focus groups (n=16) were undertaken with 79 people aged 17–83 in South Wales, UK, where there is a high prevalence of limiting long-term illnesses in a number of areas. The findings indicated that depression and stress were consistently reported to have a high impact on life and work relative to other CHPs, with work being perceived as a primary cause of these complaints. The social, moral and economic pressures involved in work and sickness absence emerged as a major theme. Differences were identified in beliefs about CHPs and work according to gender, age and socio-economic status. Beliefs were relatively consistent across geographical locations, although changes in forms of work and social structure of communities were more salient issues within the ex-coalfield areas. Care needs to be taken that initiatives aimed at reducing incapacity for work due to CHPs do not simply add to the pressure to ‘be well’.

**Title**: Boyer lectures: Fair Australia: social justice and the health gap  
**Author/s**: presented by Professor Sir Michael Marmot  
**Source**: ABC  
**Abstract**: Lecture 1: Health inequalities and the causes of the causes - There are large inequalities in health within and between countries. Areas of deprivation are characterised not only by poor health, but high rates of crime and civil unrest. In Australia, understandably there is great concern at the huge health gap between indigenous and non-indigenous Australians. But in the non-indigenous population there is a social gradient in health: the higher the education or income the better the health. To explain this we have to look at the social determinants of health: the conditions in which people are born grow, live, work and age; and inequities in power, money and resources. Broadcast 3 September.  
Lecture 2: Give every child the best start - The high rate of youth suicide in young Aboriginals in Australia and Canada alert us to the importance of early child development in all Australians. The good side of early childhood is the nurturing of psychological, linguistic, social, emotional and behavioural development. The bad side comes from adverse child experiences. Both of these follow the social gradient—the better-off the family the better is early child development. Absence of the nurturing and presence of the harmful are important for the whole of life and are strong contributors to inequalities in health in adult life. There is much we can do to make things better at both the level of national policy and at the local level supporting families and children. Broadcast 10 September.
Lecture 3: Living and working - Unemployment is bad for health, but work can damage health, too. Jobs characterised by high demands and low control, imbalance between efforts and reward, organisational injustice, shift work and job insecurity increase risk of physical and mental illness. The lower the position in the social hierarchy the greater the concentration of these stressful characteristics. When work is no longer the way out of poverty, health suffers. Broadcast 17 September.

Lecture 4: Social justice and health—making a difference - My evidence-based optimism is fuelled by examples, from round the world, of actions that make a difference to health inequalities. We need government action but action by communities, too. We should be seeking to create the conditions for individuals to take control over their lives. The aim is a more just society that enables social flourishing of all its members. Broadcast 24 September.

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Emerging Evidence Topics

- Absenteeism and presenteeism
- Asbestos
- Bullying
- Chronic pain
- Disability
- Employment and unemployment
- Ergonomics
- Management and leadership
- Musculoskeletal issues
- Occupational issues
- Psychosocial issues
- Rehabilitation
- Return to work
- Shift work
- Vocational rehabilitation
- Work health and safety
- Work stress
- Websites

Where possible, links to the full text of the articles have been included.

For further information, please contact the Comcare Library or your Employer Account Manager.

ABSENTEEISM AND PRESENTEEISM

Title Absenteeism due to mental health problems and systems for return to work: an internet-based unmatched case–control study

Author/s Doki, S., Sasahara, S., Hirai, Y. et al


Abstract The aim of this study was to investigate the risk factors for absenteeism due to mental health problems with regard to company characteristics and systems for return to work in Japan. Methods this was an Internet-based unmatched case–control study. Two hundred and fifty-eight workers who experienced over 28 days of sick leave due to mental health problems (cases) and 258 workers who have not taken sick leave (controls) were recruited. Company characteristics and the awareness and presence of systems for return to work were analysed as indicators of absenteeism. Results A total of 501 workers were included in the analysis. Females were less likely to experience absenteeism when adjustments were made for both the awareness and presence of
systems [odds ratio (OR) = 0.51 and 0.41, respectively]. Large companies showed an increased risk of having absentee workers than small companies. The awareness of a gradual resumption system and the presence of a sick pay system were related to absenteeism (OR = 2.75 and 2.40, respectively).

Conclusions the awareness and presence of systems for return to work are related to the long-term absenteeism. The predictors of sex and company size are also related to the experience of the long-term absenteeism. To understand the effect of systems for return to work on absenteeism due to mental problems, further studies are needed.

Title  Does medical certification of workers with injuries influence patterns of health service use?
Author/s  Ruseckaie, R et al
Source  Work, 2016 54 3 669-678, DOI: 10.3233/WOR-162312
Abstract  Background: Among workers with injuries who seek compensation, a general practitioner (GP) usually plays an important role in a person’s return to work (RTW) by advising if the worker is unfit for work (UFW), is able to work on alternate (ALT) duties or is fit for work and also providing referrals to other health service providers.
Objective: To examine patterns of health service utilization (HSU) in workers with injuries by condition and type of certificate issued by GP.
Methods: Zero-inflated negative binomial and logistic regressions were conducted for major healthcare services accessed over the 12-month period post-initial medical examination. Services included GP consultations, pharmacy, physiotherapy, occupational rehabilitation and psychology.
Results: The average number of physiotherapy services was greater in workers with musculoskeletal disorders, back pain and fractures. In contrast, the median number of psychological services was greater in mental health conditions (MHC). Workers with ALT certificates were more likely to use GPs, pharmacy and physiotherapy services.
Conclusion: HSU in the 12 months post-initial medical certification varied substantially according to the worker’s condition, certificate type, age, gender and residential location. Understanding these factors can facilitate more appropriate resource allocation; strategic thinking on optimal use of particular health services and enables better targeting of particular provider groups for more education on the health benefits of RTW

Title  Does physical or psychosocial workload modify the effect of musculoskeletal pain on sickness absence? a prospective study among the Finnish population.
Author/s  Neupane, Subas et al.
Abstract  Abstract: Aims: Previously, among food industry workers, multisite pain predicted sickness absence (SA) only in those with low biomechanical workload. Here we studied among a wide range of occupations whether the relationship of pain with SA was modified by the level of physical or psychosocial workload.
Methods: A nationally representative sample (Health 2000 Survey) comprised 3420 occupationally active Finns aged 30-55 years. Baseline data on musculoskeletal pain during the preceding month, strenuous work history, current physical workload, job demands, job control, support at work, lifestyle, and chronic diseases were obtained in 2000/2001 by questionnaire, interview, and clinical examination. Musculoskeletal pain in 18 body locations was combined into four sites (neck, upper limbs, low back, and lower limbs) and classified as no pain, single-site pain, and multisite pain (2-4 sites). The data were linked with information from national registers on annual SA periods lasting ≥10 workdays for 2002-2008. Negative binomial regression analysis was used.
Results: At baseline, one-third of the study sample reported single-site and one-third multisite pain. Allowing for gender and age, the employees with multisite pain in strata with high physical
workload and high job demands tended to have the highest risk of SA, but no statistically significant interactive effects between work factors and pain were observed. Further adjustment for health-related lifestyle and chronic diseases decreased the risk estimates in all strata.

Conclusion: We did not find evidence for significant modification by physical or psychosocial workload of the relationship between musculoskeletal pain and SA periods lasting ≥10 workdays.

Title  Effectiveness of very early workplace interventions to reduce sickness absence: a systematic review of the literature and meta-analysis

Author/s  Vargas-Prada, S et al

Source  Scandinavian journal of work and environmental health 2016 42 4 261-272
doi:10.5271/sjweh.3576

Abstract  Objective the aim of this review was to investigate the effectiveness of workplace return-to-work (RTW) interventions delivered at very early stages (<15 days) of sickness absence (SA). Methods a systematic literature search was conducted in PubMed, Health Management Information Consortium (HMIC), Cochrane library database, Cumulative Index to Nursing and Allied Health Literature (CINAHL), Psych Info and Embase. Using pre-established criteria, independent pairs of researchers carried out the study selection, quality appraisal and data extraction. Workplace interventions before day 15 of SA were included. Primary outcome measures included rates of and time until RTW, productivity loss, and recurrences of SA. Results we found limited available evidence on the benefits of "very early" workplace interventions in terms of RTW after a SA episode compared to usual care. Only three randomized controlled trials classed as high or intermediate quality were identified. Early part-time sick leave together with appropriate job modifications led to a reduction in the duration and recurrence of SA. There is evidence of benefit of intervening during the first two weeks of SA for musculoskeletal disorders. Conclusion our review has identified a lack of evidence from the literature at this time point to support "very early" intervention compared to usual care. The methodological design of the studies, notably the extent and timing of usual care provided and variable compliance/crossover between groups could however explain the lack of demonstrated benefit. Consensus is required on the definition of "early" and "very early" interventions, and further research is recommended to improve understanding of the factors influencing when and how best to intervene for maximum gain.

Title  Factors associated with sickness certification of injured workers by General Practitioners in Victoria, Australia.

Author/s  Ruseckaite, R et al


Abstract  Background: Work-related injuries resulting in long-term sickness certification can have serious consequences for injured workers, their families, society, compensation schemes, employers and healthcare service providers. The aim of this study was to establish what factors potentially are associated with the type of sickness certification that General Practitioners (GPs) provide to injured workers following work-related injury in Victoria, Australia. Methods: This was a retrospective population-based cohort study was conducted for compensation claims lodged by adults from 2003 to 2010. A logistic regression analysis was performed to assess the impact of various factors on the likelihood that an injured worker would receive an alternate/modified duties (ALT, n = 28,174) vs. Unfit for work (UFW, n = 91,726) certificate from their GP. Results: A total of 119,900 claims were analysed. The majority of the injured workers were males, mostly age of 45-54 years. Nearly half of the workers (49.9%) with UFW and 36.9% with ALT certificates had musculoskeletal injuries. The multivariate regression analysis revealed that for most occupations older men (55-64 years) were less likely to receive an ALT certificate (OR = 0.86, (95%CI, 0.81 - 0.91)). Workers suffering musculoskeletal injuries or occupational
diseases were nearly twice or three times at higher odds of receiving an ALT certificate when compared to fractures. Being seen by a GP experienced with workers' compensation increased the odds of receiving ALT certificate (OR = 1.16, (95%CI, 1.11 - 1.20)). Occupation and industry types were also important factors determining the type of certificate issued to the injured worker. Conclusions: This study suggests that specific groups of injured workers (i.e. older age, workers with mental health issues, in rural areas) are less likely to receive ALT certificates.

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Title Joint association of sleep problems and psychosocial working conditions with registered long-term sickness absence. a Danish cohort study
Author/s Madsen, IEH et al
Source *Scandinavian journal of work and environmental health* 2016 42 4 299-308
Abstract Objectives Sleep problems and adverse psychosocial working conditions are associated with increased risk of long-term sickness absence. Because sleep problems affect role functioning they may also exacerbate any effects of psychosocial working conditions and vice versa. We examined whether sleep problems and psychosocial working conditions interact in their associations with long-term sickness absence.
Methods We linked questionnaire data from participants to two surveys of random samples of the Danish working population (N=10 752) with registries on long-term sick leave during five years after questionnaire response. We defined sleep problems by self-reported symptoms and/or register data on hypnotics purchases of hypnotics. Psychosocial working conditions included quantitative and emotional demands, influence, supervisor recognition and social support, leadership quality, and social support from colleagues. Using time-to-event models, we calculated hazard ratios (HR) and differences and examined interaction as departure from multiplicatively and additively.
Results During 40 165 person-years of follow-up, we identified 2313 episodes of long-term sickness absence. Sleep problems predicted risk of long-term sickness absence [HR 1.54, 95% confidence interval (95% CI) 1.38 – 1.73]. This association was statistically significantly stronger among participants with high quantitative demands and weaker among those with high supervisor recognition (P<0.0001).
Conclusions High quantitative demands exacerbated the association of sleep problems with risk of long-term sickness absence whereas high supervisor recognition buffered this association. To prevent long-term sickness absence among employees with sleep problems, workplace modifications focusing on quantitative demands and supervisor recognition may be considered. Workplace interventions for these factors may more effectively prevent sickness absence when targeted at this group. The efficacy and effectiveness of such interventions needs to be established in future studies.

Title Recurrence of sickness absence episodes certified by general practitioners in the UK.
Author/s Shiels C, Gabbay M, Hillage J.
Abstract Background: Compared to other areas of sickness certification, recurrence of certified sickness absence has been relatively under-researched. Objectives: This study aims to report the extent and patterns of recurrence and to identify factors associated with higher rates of recurrence.
Methods: Sickness certification ('fit note') data were collected from 68 general practices in eight regions of the UK for 12 months.
Results: Twenty percent of 31,453 patients in the study had a recurrent certified sickness episode, with over half of these having the second episode in the same diagnostic category as their first. Mental health problems accounted for over a half of all days certified in same-diagnosis recurrent episodes. Male gender, residing in an area of social deprivation, a longer episode of initial certified sickness absence, not having return to work ('may be fit') advice in the first episode, having a mental disorder or musculoskeletal (particularly back) problem were all independently associated with a higher incidence of recurrence.
Conclusion: Differential risk of recurrence needs to be considered when designing return-to-
work interventions. Evaluation of effectiveness of interventions (particularly for sickness absentees with mental health problems) has to consider the sustainability of employment after a return to work.

Title
Safety climate, worker health and organizational health performance: testing a physical, psychosocial and combined pathway

Author/s
Bronkhurst, B Vermeeren, B

Source
International journal of workplace health management 2016 9 3

Abstract
Purpose The goal of this paper was to investigate the relationship between organizational safety climate and organizational health performance outcomes (i.e. absenteeism, presenteeism, health care utilization) mediated by individual worker health. The authors used three pathways to examine this relationship: a) a physical pathway starting with physical safety climate and mediated by musculoskeletal disorders (MSDs), b) a psychosocial pathway starting with psychosocial safety climate and mediated by emotional exhaustion, and c) a combined pathway starting with psychosocial safety climate and mediated by both MSDs and emotional exhaustion. Design/methodology/approach Three mediational multilevel analyses were conducted using a sample of 8,761 employees working in 177 health care organizations. Findings Although the findings did not support the hypothesized physical pathway, they showed that the psychosocial pathway worked satisfactorily for two of the three health performance outcomes (absenteeism and presenteeism). The combined physical and psychosocial pathway explained differences in the third outcome: health care utilization. Originality/value This is one of the few studies to include both physical and psychosocial pathways that lead to employee health and organizational performance. The results underscore the importance of paying attention to psychological health and safety in the health care workplace. Not only for the psychological health of employees, but also to improve their physical health and subsequent organizational health performance.

ASBESTOS

Title
A case of laryngeal cancer induced by exposure to asbestos in a construction site supervisor

Author/s
Roh, S et al

Source
Annals of occupational & environmental medicine August 2016 28 1-6

Abstract
Background: Construction site supervisors are exposed to many chemicals, dusts, and metals including asbestos. Asbestos is a hazardous chemical that is carcinogenic. Laryngeal cancer is not a rare disease in Korea. The most common causes of this disease are tobacco and alcohol, and representative occupational cause is asbestos. However, up to now, no case of laryngeal cancer induced by asbestos has been reported in Korea. In this study, we report such a case in a construction site supervisor. Case presentation: A 60-year-old man who had been experiencing hoarseness for 2 months was diagnosed with laryngeal cancer. The pathologic diagnosis was squamous cell carcinoma in situ, based on examination of a biopsy specimen obtained by resection of the lesion. The patient had been exposed to asbestos for 38 years at construction sites where he worked until diagnosed with laryngeal cancer. He had been exposed to asbestos when demolishing buildings and inspecting materials. Conclusion: The patient in this case worked with construction materials including asbestos and supervised construction for 38 years, and was thus exposed to asbestos at construction sites. Much of the asbestos was highly concentrated especially during demolition processes. We therefore consider the laryngeal cancer of this patient to be a work-related disease.
Simple benchmark for mesothelioma projection for Great Britain

Martinez-Miranda, M D Nielsen, B Nielsen, J P


Background It is of considerable interest to forecast the future burden of mesothelioma mortality. Data on deaths are available, whereas no measure of asbestos exposure is available.

Methods we compare two Poisson models: a response-only model with an age-cohort specification and a multinomial model with epidemiologically motivated frequencies.

Results The response-only model has 5% higher peak mortality than the dose–response model. The former performs slightly better in out-of-sample comparison.

Conclusions Mortality is predicted to peak at about 2100 deaths around 2017 among males in cohorts until 1966 and below 90 years of age. The response-only model is a simple benchmark that forecasts just as well as more complicated models.

**BULLYING**

Exposure to negative acts and risk of turnover: a study of a register-based outcome among employees in three occupational groups

Clausen, T, Hansen, J.V, Hogh A. et al.

International archives of occupational and environmental health August 2016 1-10 DOI: 10.1007/s00420-016-1161-3

Purpose To investigate whether self-reported exposure to negative acts in the workplace (bullying and threats of violence) predicted turnover in three occupational groups (human service and sales workers, office workers and manual workers).

Methods Survey data on 2766 respondents were combined with data from a national labour force register to assess turnover. Mixed effects logistic regression analysis was used to examine the association between self-reported exposure to negative acts at baseline and risk of turnover after a 1-year follow-up.

Results We found no significant associations between exposure to negative acts (bullying and threats of violence) and risk of turnover. When participants were stratified by occupational group and analyses were adjusted for age, gender, tenure and psychosocial working conditions, we found that exposure to bullying predicted risk of turnover in office workers (OR 2.03, 95 % CI 1.05–3.90), but neither in human service and sales workers, nor in manual workers. The association in office workers lost statistical significance when additionally adjusted for depressive symptoms (OR 1.77, 95 % CI 0.90–3.49). However, in a sensitivity analysis in which we used a 2-year (instead of a 1-year) follow-up period the association between bullying and turnover remained statistically significant in office workers even after adjusting for depressive symptoms (OR 2.10, 95 % CI 1.17–3.76). We found no statistically significant associations between threats of violence and risk of turnover in the stratified analyses.

Conclusion Exposure to bullying predicted risk of turnover among office workers but not among human service and sales workers and among manual workers. Threats of violence were not associated with turnover in any occupational group.

The role of poor sleeps in the relation between workplace bullying/unwanted sexual attention and long-term sickness absence

Nabe-Nielsen et al

International archives of occupational & environmental health August 2016 89 6 967-979 13 4 DOI: 10.1007/s00420-016-1136-4

Purpose: While exposure to bullying and unwanted sexual attention was previously found to increase the risk of sickness absence, the underlying mechanisms are largely unknown. Poor
sleep can be a consequence of stressful exposures and a cause of poor health, and poor sleep is also a determinant of insufficient recovery. Therefore, the present study investigated whether poor sleep mediates and/or moderates the association between bullying and unwanted sexual attention, on the one hand, and long-term sickness absence (LTSA), on the other hand.

Methods: We used questionnaire data from 7650 individuals contributing with 15,040 2-year observation periods. Workplace bullying, unwanted sexual attention, disturbed sleep, and difficulties awakening were measured at three time points, and participants were followed in registers to measure the occurrence of LTSA, defined as ≥30 consecutive days of sickness absence during the subsequent 2 years.

Results: The odds of LTSA were significantly increased by workplace bullying (OR 1.77; 95 % CI 1.50-2.12) and unwanted sexual attention (OR 1.55; 95 % CI 1.06-2.29). Together, disturbed sleep and difficulties awakening mediated 12.8 % (95 % CI 8.1-19.8) of the association between bullying and long-term sickness absence, and 8.5 % (95 % CI −0.45 to 37.1) of the association between unwanted sexual attention and long-term sickness absence in the fully adjusted model. Neither disturbed sleep nor difficulties awakening moderated these associations.

Conclusion: As expected, bullying and unwanted sexual attention were prospectively associated with long-term sickness absence. Only a small part of this association was mediated by poor sleep.

CHRONIC PAIN

Title: The psychology of chronic pain
Author/s: Nicholson Perry, Kathryn
Source: *Inpsych special issue psychology and chronic pain* August 2016 38 4
Abstract: Recognition of the contribution persistent pain makes to return to function after workplace injuries, for example, has meant that the demand for access to psychologists who can enhance functional outcomes is markedly on the rise. Consequently, the size and scope of the psychological workforce participating in the prevention and management of chronic pain is now wider and more varied than ever.

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Title: Preventing disabling chronic pain by engaging psychologists in the acute phase
Author/s: Prof Michael Nicholas
Source: *Inpsych special issue psychology and chronic pain* August 2016 38 4
Abstract: Soft tissue or musculoskeletal injuries are the most common work-related injuries. For primary care providers the main goals with this group are promoting recovery (especially successful return to work [RTW]), minimising pain, and preventing secondary disability. It is not known if we can prevent the development of chronic pain, but for some time we have had good evidence from systematic reviews and meta-analyses of prospective studies that psychological and social/environmental factors are strong predictors of delayed recovery and disability associated with chronic pain. The good news is that these factors (e.g. anxiety, depression, poor coping skills, catastrophising, etc.) should be modifiable and, if successful, the likelihood of disabling chronic pain should be reduced.

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Title: Intensive pain programs: A reflection on what makes them work and for whom?
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<th>Title</th>
<th>Reversing maladaptive plasticity in chronic pain</th>
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<td>Author/s</td>
<td>Day, Melissa et al</td>
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<td>Source</td>
<td><em>Inpsych</em> Special issue psychology and chronic pain August 2016 38 4</td>
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<td>Abstract</td>
<td>With advances in understanding of overlapping mechanisms of neuroplasticity from a trans diagnostic perspective, it should be possible to use more targeted techniques to enhance adaptive pathways. Although we are not yet at the point where we can harness technology clinically to identify unique neurological signatures of an individual's chronic pain and use algorithms to match this signature to the treatment most likely to be of benefit, this is a future goal.</td>
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<th>Title</th>
<th>Do we need a third mechanistic descriptor for chronic pain states?</th>
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<td>Author/s</td>
<td>Kosek E et al</td>
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<td>Abstract</td>
<td>The redefinition of neuropathic pain, which specifically excludes the concept of “dysfunction,” has left a large group of patients without a valid pathophysiological descriptor for their experience of pain. This group comprises people who have neither obvious activation of nociceptors nor neuropathy (defined as disease or damage of the somatosensory system) but in whom clinical and psychophysical findings suggest altered nociceptive function. Typical such patient groups include those labelled as having fibromyalgia, complex regional pain syndrome (CRPS) type 1, other instances of “musculoskeletal” pain (such as “nonspecific” chronic low-back pain), and “functional” visceral pain disorders (such as irritable bowel syndrome, bladder pain syndrome). The aim of this topical review was to propose, for debate, a third mechanistic descriptor intended for chronic pain characterized by altered nociceptive function.</td>
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<th>Title</th>
<th>Health care providers' judgments in chronic pain: the influence of gender and trustworthiness</th>
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<td>Author/s</td>
<td>Schafer, G et al</td>
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<td>Source</td>
<td><em>Pain</em> August 2016 157 8 1579-1834</td>
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| Abstract | Estimates of patients’ pain, and judgments of their pain expression, are affected by characteristics of the observer and of the patient. In this study, we investigated the impact of high or low trustworthiness, a rapid and automatic decision made about another, and of gender and depression history on judgments made by pain clinicians and by medical students. Judges viewed a video of a patient in pain presented with a brief history and rated his or her pain, and the likelihood that it was being exaggerated, minimized, or hidden. Judges also recommended various medical and treatment options. Contrary to expectations, trustworthiness had no main effect on pain estimates or judgments, but interacted with gender producing pervasive bias. Women, particularly those rated of low trustworthiness, were estimated to have less pain and to...
be more likely to exaggerate it. Unexpectedly, judgments of exaggeration and pain estimates were independent. Consistent with those judgments, men were more likely to be recommended analgesics, and women to be recommended psychological treatment. Effects of depression history were inconsistent and hard to interpret. Contrary to expectations, clinicians' pain estimates were higher than medical students', and indicated less scepticism. Empathy was unrelated to these judgments. Trustworthiness merits further exploration in healthcare providers' judgments of pain authenticity and how it interacts with other characteristics of patients. Furthermore, systematic disadvantage to women showing pain is of serious concern in healthcare settings.

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Incremental health care costs for chronic pain in Ontario, Canada: a population-based matched cohort study of adolescents and adults using administrative data

**Title**

Incremental health care costs for chronic pain in Ontario, Canada: a population-based matched cohort study of adolescents and adults using administrative data

**Author/s**

Hogan, NE et al

**Source**


**Abstract**

Little is known about the economic burden of chronic pain and how chronic pain affects health care utilization. We aimed to estimate the annual per-person incremental medical cost and health care utilization for chronic pain in the Ontario population from the perspective of the public payer. We performed a retrospective cohort study using Ontario health care databases and the electronically linked Canadian Community Health Survey (CCHS) from 2000 to 2011. We identified subjects aged ≥12 years from the CCHS with chronic pain and closely matched them to individuals without pain using propensity score matching methods. We used linked data to determine mean 1-year per-person health care costs and utilization for each group and mean incremental cost for chronic pain. All costs are reported in 2014 Canadian dollars. After matching, we had 19,138 pairs of CCHS respondents with and without chronic pain. The average age was 55 years (SD = 18) and 61% were female. The incremental cost to manage chronic pain was $1742 per person (95% confidence interval [CI], $1488-$2020), 51% more than the control group. The largest contributor to the incremental cost was hospitalization ($514; 95% CI, $364-$683). Incremental costs were the highest in those with severe pain ($3960; 95% CI, $3186-$4680) and in those with most activity limitation ($4365; 95% CI, $3631-$5147). The per-person cost to manage chronic pain is substantial and more than 50% higher than a comparable patient without chronic pain. Costs are higher in people with more severe pain and activity limitations.

**Title**

Integrated and consumer-directed care: a necessary paradigm shift for rural chronic ill health

**Author/s**

Ranson, Nicole E et al

**Source**

*Australian journal of primary health* 2016 22 3 176-180 5 DOI: 10.1071/PY15056

**Abstract**

Chronic ill health has recently emerged as the most important health issue on a global scale. Rural communities are disproportionately affected by chronic ill health. Many health systems are centred on the management of acute conditions and are often poorly equipped to deal with chronic ill health. Cardiovascular disease (CVD) is one of the most prominent chronic ill health conditions and the principal cause of mortality worldwide. In this paper, CVD is used as an example to demonstrate the disparity between rural and urban experience of chronic ill health, access to medical care and clinical outcomes. Advances have been made to address chronic ill health through improving self-management strategies, health literacy and access to medical services. However, given the higher incidence of chronic health conditions and poorer clinical outcomes in rural communities, it is imperative that integrated health care emphasises greater collaboration between services. It is also vital that rural GPs are better supported to work with their patients, and that they use consumer-directed approaches to empower patients to direct and coordinate their own care.
Understanding stigma and chronic pain: a state-of-the-art review

De Ruddere, L Craig, K


Abstract: The stigma associated with chronic pain is not well understood, with research lacking accounts of determinants including underlying mechanisms in stigmatizing persons and details concerning vulnerabilities and the impact of stigmatized persons. Furthermore, prevention strategies for teaching how to chat with other stigmatizing reactions and programs aimed at minimizing stigmatizing behaviours of observers are scarce. This topical review briefly describes the current understanding of the stigma attached to chronic pain and the intent to provide some thought provoking ideas and highlights future directions that will inspire both researchers and clinicians.

Well, this is it. just get on with it': pain willingness and activity engagement in people with chronic pain

Titus, Cecelia A. Biggs, Herbert C

The Australian journal of rehabilitation counselling July 2016 22 01 13-26 http://dx.doi.org/10.1017/jrc.2016.5

Abstract: Acceptance of chronic pain is associated with positive health outcomes. The study examined participants’ chronic pain experiences by exploring two acceptance factors: pain willingness and activity engagement. Eleven participants (seven women and four men) participated in semi-structured interviews. Interview transcripts were analysed to identify pain willingness and activity engagement in participants’ experiences. The study found that participants demonstrated some pain willingness and activity engagement, but that avoidance and control could result in unwanted activity restrictions. Three themes were identified in participants’ accounts of getting on with their lives: making necessary adjustments, taking control and finding purpose and meaning. To improve outcomes for people with chronic pain, counsellors and rehabilitation professionals should encourage pain acceptance, and educate their clients about the effects of social withdrawal, and avoidance and control of pain.

An interview guide for clinicians to identify a young disabled person’s motivation to work

Faber, BJM

Work 2016 54 3 577-590 DOI: 10.3233/WOR-162337

Abstract: Background: The percentage of young people with disabilities who are employed is relatively low. Motivation is considered to be an important factor in facilitating or hindering their ability to obtain employment. Objective: We aimed to develop a topic list that could serve as an interview guide for professionals in occupational health care which would aid them in their discussion of work motivation-related issues with this group. Methods: We systematically searched Pubmed, PsychInfo and Picarta. Studies were included if they described aspects of work motivation and/or instruments that assess work motivation. Based on the results of …our literature survey, we developed a list of topics that had been...
shown to be related to work motivation.

Results: Our search resulted in 12 articles describing aspects of work motivation and 17 articles describing instruments that assess work motivation. The aspects that we found were intrinsic motivation, extrinsic motivation, goal setting, self-efficacy, expectancy, values and work readiness. Based on this information we developed an interview guide that includes seven topic areas: intrinsic motivation, extrinsic motivation, goal setting, expectancy, values, self-efficacy, and work readiness.

Conclusion: The topics within the interview guide and the literature survey data that is presented will shed light on the role that motivation plays on the work participation among young people with disabilities.

Weblink

**Title**
The impact on health of employment and welfare transitions for those receiving out-of-work disability benefits in the UK

**Author/s**
Curnock, E Leyland, A Popham, F

**Source**
*Social science & medicine* August 2016 162 1-10
http://dx.doi.org/10.1016/j.socscimed.2016.05.042

**Abstract**
Employment status has a dynamic relationship with health and disability. There has been a striking increase in the working age population receiving out-of-work disability benefits in many countries, including the UK. In response, recent UK welfare reforms have tightened eligibility criteria and introduced new conditions for benefit receipt linked to participation in return-to-work activities. Positive and negative impacts have been suggested but there is a lack of high quality evidence of the health impact when those receiving disability benefits move towards labour market participation. Using four waves of the UK's Understanding Society panel survey (2009–2013) three different types of employment and welfare transition were analysed in order to identify their impact on health. A difference-in-difference approach was used to compare change between treatment and control groups in mental and physical health using the SF-12. To strengthen causal inference, sensitivity checks for common trends used pre-baseline data and propensity score matching. Transitions from disability benefits to employment (n = 124) were associated on average with an improvement in the SF12 mental health score of 5.94 points (95% CI = 3.52–8.36), and an improvement in the physical health score of 2.83 points (95% CI = 0.85–4.81) compared with those remaining on disability benefits (n = 1545). Transitions to unemployed status (n = 153) were associated with a significant improvement in mental health (3.14, 95% CI = 1.17–5.11) but not physical health. No health differences were detected for those who moved on to the new out-of-work disability benefit. It remains rare for disability benefit recipients to return to the labour market, but our results indicate that for those that do, such transitions may improve health, particularly mental health. Understanding the mechanisms behind this relationship will be important for informing policies to ensure both work and welfare are 'good for health' for this group.

**Title**
Midlife job profiles and disabilities in later life: a 28-year follow-up of municipal employees in Finland

**Author/s**
Prakash, K et al

**Source**
*International archives of occupational & environmental health* Aug 2016 89 6 997-1007 11
DOI: 10.1007/s00420-016-1133-7

**Abstract**
Purpose: Occupations during adult life may have long-term effects and subsequently increase the risk of disability in old age. We investigated the associations between job profile groups in midlife and disability in old age for women and men.

Methods: This prospective 28-year follow-up study (1981-2009) examined 2998 municipal employees (1892 women and 1106 men) aged 44-58 years at baseline. A detailed analysis of the demands of 88 occupations based on interviews and observations at the work places was made at baseline. Thirteen job profile clusters emerged. Questionnaire information on health, lifestyle and socio-demographic factors was collected at baseline. In 2009, five Activities of Daily
Living and seven Instrumental Activities of Daily Living tasks were assessed. A sum score of '0-12' was calculated using 12 dichotomous tasks where '0' indicates no difficulties in any tasks and '1-12' indicates increasing disability. Negative binomial regression was used to calculate rate ratios (RR) and their 95% confidence intervals (CIs) for disability due to midlife job profiles.

Results: After adjusting for age, socioeconomic, lifestyle and health-related characteristics, women in auxiliary (RR 2.1, 95% CI 1.4-3.2), home care (2.1, 1.4-3.2), kitchen supervision (2.0, 1.1-3.6) and office (1.6, 1.1-2.4) job profiles had a higher risk of disability in later life than those in administrative jobs. Auxiliary (1.5, 1.1-2.9) and technical supervision (1.7, 1.1-2.7) job profiles carried an increased risk among men.

Conclusion: Midlife job profiles mainly linked with physically heavy work were strong predictors of disability in later life. In women, office work also increased the risk of disability.
ERGONOMICS

Title Call center productivity over 6 months following a standing desk intervention

Author/s Garrett, G et al

Source IEE transaction on occupational ergonomics and human factors 2016
http://dx.doi.org/10.1080/21577323.2016.1183534

Abstract Stand-capable desks have been shown to successfully reduce sedentary behavior in the modern office, but whether their utilization improves cognitive productivity is not known. We compared productivity between stand-capable desk users and traditional seated desk users in a call center environment. Data were collected daily over a continuous 6-month period. We found that increased stand-capable desk use is a likely contributor to increased productivity over traditional seated desk use. These findings indicate that use of stand-capable desks as ergonomic interventions to improve physical health among employees may also positively impact their work productivity.

Background: Many office employees are spending up to 90% of their workday seated, and employers are considering stand-capable desks as a way to increase physical activity throughout the day. When deciding on adoption of stand-capable workstations, a major concern for employers is that the benefits, over time, may not offset the initial cost of implementation.

Methods: This study compared objective measures of productivity over time between a group of stand-capable desk users and a seated control group in a call center. Comparison analysis was completed for continuous 6-month secondary data for 167 employees, across two job categories. Results: Users of stand-capable desks were ~45% more productive on a daily basis compared to their seated counterparts. Further, productivity of the stand-capable desk users significantly increased over time, from ~23% in the 1st month to ~53% over the next 6 months. Finally, this productivity increase was similar for employees across both job categories.

Conclusions: These findings suggest important benefits of employing stand-capable desks in the workforce to increase productivity. Prospective studies that include employee health status, perceptions of (dis)comfort and preference over time, along with productivity metrics, are needed to test the effectiveness of stand-capable desks on employee health and performance.

Title Dissemination and use of a participatory ergonomics guide for workplaces

Author/s Van Eerd, Dwayne et al

Source Ergonomics 2016 59 6 851-858 http://dx.doi.org/10.1080/00140139.2015.1088073

Abstract Musculoskeletal disorders (MSDs) result in lost-time injury claims and lost productivity worldwide, placing a substantial burden on workers and workplaces. Participatory ergonomics (PE) is a popular approach to reducing MSDs; however, there are challenges to implementing PE programmes. Using evidence to overcome challenges may be helpful but the impacts of doing so are unknown. We sought to disseminate an evidence-based PE tool and to describe its use. An easy-to-use, evidence-based PE Guide was disseminated to workplace parties, who were surveyed about using the tool. The greatest barrier to using the tool was a lack of time. Reported tool use included for training purposes, sharing and integrating the tool into existing programmes. New actions related to tool use included training, defining team responsibilities and suggesting programme implementation steps. Evidence-based tools could help ergonomists overcome some challenges involved in implementing injury reduction programmes such as PE.

Practitioner Summary: Practitioners experience challenges implementing programmes to reduce the burden of MSDs in workplaces. Implementing participatory interventions requires multiple workplace parties to be ‘on-board’. Disseminating and using evidence-based guides may help to overcome these challenges. Using evidence-based tools may help ergonomics practitioners implement PE programmes.
The impact of use of dual monitor screens on 3D head–neck posture and activity of neck muscles

Nimbarte, A et al

IEE transactions on occupational ergonomics and human factors
http://dx.doi.org/10.1080/21577323.2012.667051

Computers with dual monitor screens are being increasingly used at many workplaces. Altered screen layout and increased viewing space associated with dual monitor screens may affect head–neck working postures and the activity of neck muscles. However, this problem has not been investigated in the past, and standard guidelines based on empirical data are not available for setting up a computer workstation with dual monitor screens. The present study compared the effects of single versus dual monitor screens on 3D head–neck postures and the activity of neck muscles in computer users. The results of this study have demonstrated that working on a video display unit workstation with dual monitor screens involved more rotated, asymmetric head–neck postures and higher activation of the anterior neck muscles than a video display unit workstation with a single monitor screen.

Background: Among workstation design factors, placement of the computer monitor screen is the most frequently identified risk factor for neck and shoulder pain among video display unit users. One of the recent changes in video display unit workstation design that may influence the position of computer monitor screens is the use of dual monitors. Some studies have shown that user performance and efficiency was positively affected by the use of dual monitor screens; however, the effect of use of dual monitor screens on the biomechanical behavior of the head–neck region is currently unknown.

Purpose: This study was aimed at understanding the effect of single versus dual monitor screens on 3D head–neck postures and the activity of neck muscles.

Method: Ten healthy participants performed three types of video display unit tasks: (1) reading for 10 minutes, (2) typing for 5 minutes, and (3) performing search and find tasks for 10 minutes using single and dual monitor screens. An inertial motion-capture system was used to measure 3D head–neck postures. Activity of sternocleidomastoid and cervical trapezius muscles was recorded bilaterally using surface electromyography.

Results: Use of dual monitor screens significantly increased head–neck rotation by 9.0° compared to the single monitor screen. The range of motion of head–neck rotation increased significantly by 8.4° using dual monitor screens compared to the single monitor screen. Corresponding to the increase in the head–neck rotation, a contralateral increase in the activity of the right sternocleidomastoid muscle was observed with the dual monitor screen layout. Activity of cervical trapezius muscle was not affected by the type of monitor layout.

Conclusions: Increased activation of anterior neck muscles caused by asymmetrical, more rotated head–neck postures while operating a video display unit workstation with dual monitor screens may increase the risk of neck musculoskeletal disorders, especially with prolonged computer use.

A randomised control trial of the cognitive effects of working in a seated as opposed to a standing position in office workers

Russell, Bridget A et al

Ergonomics 2016 737-744

Sedentary behaviour is increasing and has been identified as a potential significant health risk, particularly for desk-based employees. The development of sit-stand workstations in the workplace is one approach to reduce sedentary behaviour. However, there is uncertainty about the effects of sit-stand workstations on cognitive functioning. A sample of 36 university staff participated in a within-subjects randomised control trial examining the effect of sitting vs. standing for one hour per day for five consecutive days on attention, information processing speed, short-term memory, working memory and task efficiency. The results of the study showed no statistically significant difference in cognitive performance or work efficiency between the sitting and standing conditions, with all effect sizes being small to very small (all ds < .2). This result suggests that the use of sit-stand workstations is not associated with a reduction in cognitive performance.

Practitioner Summary: Although it has been reported that the use of sit-stand desks may help offset adverse health effects of prolonged sitting, there is scant evidence about changes in...
productivity. This randomised control study showed that there was no difference between sitting and standing for one hour on cognitive function or task efficiency in university staff.

**MANAGEMENT AND LEADERSHIP**

**Title**
Lead, Leader, Leadership

**Author/s**
Day, Gary E

**Source**
Australian health review 2016 40 355–356
http://dx.doi.org/10.1071/AH40n4_ED

**Abstract**
Of late, the world has been given some interesting insights into political leadership, whether it be surrounding Great Britain's decision to leave the European Union; the race to the White House; the approach to law and order in the Philippines; dealing with a military coup d'état in Turkey or creating artificial islands to extend maritime borders in the South China Sea. Each of these examples holds lessons into how world leaders approach events of significant national interest. Each example points to important messaging and positioning one’s self to provide the country with direction, hope and a sense of national security. It could be argued that each of these leaders have found this somewhat challenging as the messaging has largely appealed to insecurities of the local population. If we draw our attention to politics closer to home, the recent federal election provided a fascinating case study into leadership and issues that have traction in our broader community. The battlefield for this election wasn’t border security; the environment; taxation or the role and function of trade unions.

**Title**
Making technological innovation work for sustainable development

**Author/s**
Anadon, L D et al

**Source**
Proceedings of the national academy of sciences of the United States of America
August 2016 113 35  9682-9690
doi: 10.1073/pnas.1525004113

**Abstract**
This paper presents insights and action proposals to better harness technological innovation for sustainable development. We begin with three key insights from scholarship and practice. First, technological innovation processes do not follow a set sequence but rather emerge from complex adaptive systems involving many actors and institutions operating simultaneously from local to global scales. Barriers arise at all stages of innovation, from the invention of a technology through its selection, production, adaptation, adoption, and retirement. Second, learning from past efforts to mobilize innovation for sustainable development can be greatly improved through structured cross-sectoral comparisons that recognize the socio-technical nature of innovation systems. Third, current institutions (rules, norms, and incentives) shaping technological innovation are often not aligned toward the goals of sustainable development because impoverished, marginalized, and unborn populations too often lack the economic and political power to shape innovation systems to meet their needs. However, these institutions can be reformed, and many actors have the power to do so through research, advocacy, training, convening, policymaking, and financing. We conclude with three practice-oriented recommendations to further realize the potential of innovation for sustainable development: (i) channels for regularized learning across domains of practice should be established; (ii) measures that systematically take into account the interests of underserved populations throughout the innovation process should be developed; and (iii) institutions should be reformed to reorient innovation systems toward sustainable development and ensure that all innovation stages and scales are considered at the outset.
Title: Measuring dimensions of a healthy workplace climate: a user-friendly assessment tool

Author/s: McHugh, G

Source: International journal of disability management 2016 11 1 11
DOI: http://dx.doi.org/10.1017/idm.2016.1

Abstract: Although the concept of healthy workplaces has historical roots in the extant literature, it remains an elusive concept to define and apply in the workplace. Nonetheless, the literature does suggest that it is a challenging and continuously improving process of supporting, protecting and promoting the health of the employee. The aim of this study was to devise a user-friendly, climate-specific assessment tool to evaluate employees' perceptions and knowledge of the practices and procedures in the workplace that prioritise the development of a healthy, supportive workplace. After extensive literature review and early stage pilot-testing of several independent sites within an organisation, a 31-item Likert-type scale — The Workplace Scale (WPS) — was brought forward to test its psychometric properties using an independent international sample that was gathered using email distribution. These initial distribution contacts were two of the author's professional colleagues and thereafter the scale was cascaded electronically to respondents in several countries. The factor analysis conducted on the data obtained from 108 respondents yielded a solid five factor solution that was consistent with earlier test administrations and revealed interpretable and distinct factors that strongly loaded on pertinent dimensions relevant to a healthy workplace. The tangible product is a user-friendly tool to baseline the development of a healthy, supportive workplace, while providing employees with an efficient upward communication mechanism to enable management to monitor progress. Devising the WPS was undertaken as part of wider study that subsequently compared the WPS against measures of climate, leadership and culture and is reported elsewhere.

Title: Overcommitment as a predictor of effort–reward imbalance: evidence from an 8-year follow-up study

Author/s: Feldt, T et al

Source: Scandinavian journal of work and environmental health 2016 42 4 309-319
doi:10.5271/sjweh.3575

Abstract: Objective The effort–reward imbalance (ERI) model includes the personal characteristic of overcommitment (OC) and the job-related characteristics of effort, reward, and ERI, all of which are assumed to play a role in an employee’s health and well-being at work. The aim of the present longitudinal study was to shed more light on the dynamics of the ERI model by investigating the basic hypotheses related to the role of OC in the model, ie, to establish whether an employee’s OC could be a risk factor for an increased experience of high effort, low reward, and high ERI at work.

Methods The study was based on 5-wave, 8-year follow-up data collected among Finnish professionals in 2006 (T1, N=747), 2008 (T2, N=422), 2010 (T3, N=368), 2012 (T4, N=325), and 2014 (T5, N=273). The participants were mostly male (85% at T1) and the majority of them worked in technical fields. OC, effort, reward, and ERI were measured at each time point with the 23-item ERI scale.

Results Three cross-lagged structural equation models (SEM) were estimated and compared by using full information maximum likelihood method: (i) OC predicted later experiences of effort, reward, and ERI (normal causation model), (ii) effort, reward, and ERI predicted later OC (reversed causation model), and (iii) associations in normal causal and reversed causal models were simultaneously valid (reciprocal causation model). The results supported the normal causation model: strong OC predicted later experiences of high effort, low reward and high ERI. Conclusions High OC is a risk factor for an increased experience of job strain factors; that is, high effort, low reward, and high ERI. Thus, OC is a risk factor not only for an employee’s well-being and health but also for an increasing risk for perceiving adverse job strain factors in the working environment.
The practice manager role and relevance to general practice-based research: a review of the literature

Wood, Anna et al

Australian journal of primary health 2016 22 2 86-92 DOI: 10.1071/PY15070

Research based in Australian general practice is essential to ensure that health care provided in this setting is evidenced-based and delivered effectively. Research designed for general practice must be feasible and acceptable to general practitioners (GPs) and practice managers (PMs), who are responsible for coordinating practice activities. However, little is known about the PM role and their contribution to research undertaken in general practice. The aim of this systematic review is to examine this role and its relevance to the conduct of general practice-based research. Databases searched (Medline, PubMed, CINAHL and Scopus) identified six relevant studies. One study investigated the role of the PM in general practice-based research and five examined aspects of the PM role. Data about study design, number and type of participants and findings was extracted and managed using a matrix framework. The limited findings suggested PMs are interested in managing research at the practice level. The PM is central to practice communication and coordination but the role varies depending on qualifications, size of practice and expectations of the GPs. This paper highlights the paucity of evidence about the PM role and their contribution to the conduct of research undertaken in general practice. Further investigation is required to gain insights into establishing and managing future research in Australian general practice.

A self-reported survey on the confidence levels and motivation of New South Wales practice nurses on conducting advance-care planning (ACP) initiatives in the general-practice setting

Fan, Emilia Rhee, Joel J

Australian journal of primary health August 2016 http://dx.doi.org/10.1071/PY15174

Nurses are well positioned to initiate and conduct advance-care planning (ACP) conversations; however, there has been limited research on practice nurses performing this role in Australia. The aim of the present study was to understand the beliefs, attitudes, perceptions, confidence, training and educational needs of New South Wales practice nurses with regards to involvement in ACP. A cross-sectional online survey was conducted in August to October 2014. Nurses were recruited through nursing organisations and Medicare Locals. There were 147 completed surveys (n = 147). Participants were mostly female registered nurses, with a median age of 50, and 6 years of practice-nurse experience. Practice nurses were generally positive towards their involvement in ACP and believed it would be beneficial for the community. Their confidence in initiating ACP increased as their familiarity with patients increased. They showed a high level of interest in participating in training and education in ACP. Barriers to their involvement in ACP included the lack of a good documentation system, limited patient-education resources and unclear source of remuneration. Nurses were also concerned over legalities of ACP, ethical considerations and their understanding of end-of-life care options. Nevertheless, they were highly receptive of integrating ACP discussions and were willing to enhance their skills. These findings uncover a need for further training and development of practice nurses for ACP discussions.

Carpal tunnel syndrome and manual work: the octopus cohort, results of a ten-year longitudinal study

Violante, FS

Scandianvian journal of work and environmental health 2016 42 4 280-290 doi:10.5271/sjweh.3566

MUSCULOSKELETAL ISSUES
Abstract

Objective The American Conference of Governmental Industrial Hygienists (ACGIH) proposed a method to assess the hand, wrist and forearm biomechanical overload based on exertion frequency (hand-activity level) and force use (normalized peak force). We applied the ACGIH threshold limit value (TLV) method to a large occupational cohort to assess its ability to predict carpal tunnel syndrome (CTS) onset.

Methods A cohort of industrial and service workers was followed-up between 2000 and 2011. We investigated the incidence of CTS symptoms and CTS confirmed by nerve conduction studies (NCS). We then classified exposure with respect to action limit (AL) and TLV. Cox regression models including age, gender, body mass index, and presence of predisposing pathologies were conducted to estimate hazard ratios (HR) of CTS and population attributable fractions.

Results We analyzed data from 3131 workers [females, N=2032 (65%); mean age at baseline 39.3, standard deviation (SD) 9.4 years]. We observed 431 incident cases of CTS symptoms in 8000 person-years and 126 cases of CTS confirmed by NCS in 8883 person-years. The ACGIH TLV method predicted both CTS symptoms [HR between AL and TLV 2.18, 95% confidence interval (95% CI) 1.86–2.56; above TLV 2.07, 95% CI 1.52–2.81] and CTS confirmed by NCS (HR between AL and TLV 1.93, 95% CI 1.38–2.71; above TLV 1.95, 95% CI 1.27–3.00). About one third of CTS cases were attributable to exposure levels above the AL.

Conclusions The ACGIH TLV method predicted the risk of CTS, but the dose–response was flat above the AL; a fine-tuning of the proposed thresholds should be considered.

Title

The effect of psychosocial stress on muscle activity during computer work: comparative study between desktop computer and mobile computing products

Author/s

Taib, M F M

Source

Work 2016 54 3 543-555 DOI: 10.3233/WOR-162334

Abstract

Background: The popularity of mobile computing products is well known. Thus, it is crucial to evaluate their contribution to musculoskeletal disorders during computer usage under both comfortable and stressful environments.

Objective: This study explores the effect of different computer products’ usages with different tasks used to induce psychosocial stress on muscle activity.

Methods: Fourteen male subjects performed computer tasks: sixteen combinations of four different computer products with four different tasks used to induce stress. Electromyography for four muscles on the forearm, shoulder and neck regions and task performances were recorded.

Results: The increment …of trapezius muscle activity was dependent on the task used to induce the stress where a higher level of stress made a greater increment. However, this relationship was not found in the other three muscles. Besides that, compared to desktop and laptop use, the lowest activity for all muscles was obtained during the use of a tablet or smart phone. The best net performance was obtained in a comfortable environment. However, during stressful conditions, the best performance can be obtained using the device that a user is most comfortable with or has the most experience with.

Conclusions: Different computer products and different levels of stress play a big role in muscle activity during computer work. Both of these factors must be taken into account in order to reduce the occurrence of musculoskeletal disorders or problems.

Weblink

A longitudinal study of neck and upper limb musculoskeletal disorders and alternative measures of vibration exposure.

Author/s

Bovenzi, Massimo; Prodi, Andrea; Mauro, Marcella

Source

International archives of occupational & environmental health August 2016 89 6 923-933 11 4

Abstract

Objective: To investigate the exposure-response relationships between alternative frequency weightings of hand-transmitted vibration (HTV) and neck and upper limb musculoskeletal disorders (MSDs) in a cohort of HTV workers.

Methods: In a three-year longitudinal study, the occurrence of neck and upper limb MSDs was
investigated in 249 HTV workers and 138 control men. In the HTV workers, MSDs were related to measures of daily vibration exposure expressed in terms of 8-h energy-equivalent frequency-weighted acceleration magnitude [A(8)]. To calculate A(8), the acceleration magnitudes of vibration were weighted by means of four alternative frequency weightings of HTV. The associations between MSDs, individual characteristics, physical work load other than vibration, and psychological strain were also investigated.

Results: The occurrence of upper limb MSDs was greater in the HTV workers than in the controls. After adjustment for potential confounders, the occurrence of elbow/forearm and wrist/hand MSDs increased with the increase in vibration exposure. A measure of model selection did not reveal any substantial difference in the performance of the alternative frequency weightings of HTV for the prediction of neck and upper limb MSDs. In the study population, age, hard physical work load, and poor psychological well-being were associated with both neck and upper limb MSDs. Conclusions: In this study, there was evidence for significant exposure-response relationships between HTV exposure and MSDs in the distal sites of the upper limbs. There were no differences in the prediction of neck and upper limb MSDs between measures of daily vibration exposure calculated with alternative frequency weightings of acceleration magnitude.

Title
The occurrence of overload at work and musculoskeletal pain in young physiotherapists

Author/s
Truszczynska, A Scherer, A Drzai-Grabiec,J

Source
Work 2016 54 3 609-616 DOI: 10.3233/WOR-162343

Abstract
Background: A job requiring stooping, lifting, carrying loads and multiple repetitions of the same movement patterns leads to overloading the musculoskeletal system.
Objective: The aim of the study was to assess the work-related load experienced by physiotherapists and the occurrence of the musculoskeletal system overload.
Methods: The study included 108 young physiotherapists, 69 women and 39 men, aged from 25 to 35 years (mean 27.12 ± 3.72 years). The study used an anonymous questionnaire and Quick Exposure Check.
Results: The most common musculoskeletal complaints were as follows: 70 physiotherapists (64.8%) reported low back pain, 60 (55.6%) cervical pain, and 34 (31.5%) pain in the wrists and fingers. Statistically significant positive correlations were revealed between the number of years worked in the profession and shoulder pain. The number of hours of work per week was positively correlated with the occurrence of pain in all analyzed body areas. Professional experience was negatively correlated with the level of stress felt. Physiotherapists dealing with manual therapy and exercise physiotherapy were particularly vulnerable to musculoskeletal overload.
Conclusions: Popularization of knowledge regarding ergonomics among physiotherapists could reduce the occurrence of musculoskeletal overload

Title
The musculoskeletal diagnosis cohort: examining pain and pain care among veterans

Author/s
Goulet, J L et al

Source
Pain August 2016 8 1696-1703 doi: 10.1097/j.pain.0000000000000567

Abstract
Musculoskeletal disorders (MSDs) are highly prevalent, painful, and costly disorders. The MSD Cohort was created to characterize variation in pain, comorbidities, treatment, and outcomes among patients with MSD receiving Veterans Health Administration care across demographic groups, geographic regions, and facilities. We searched electronic health records to identify patients treated in Veterans Health Administration who had ICD-9-CM codes for diagnoses including, but not limited to, joint, back, and neck disorders, and osteoarthritis. Cohort inclusion criteria were 2 or more outpatient visits occurring within 18 months of one another or one inpatient visit with an MSD diagnosis between 2000 and 2011. The first diagnosis is the index date. Pain intensity numeric rating scale (NRS) scores, comorbid medical and mental health diagnoses, pain-related treatments, and other characteristics were collected retrospectively and prospectively. The cohort included 5,237,763 patients; their mean age was 59, 6% were women, 15% identified as black, and 18% reported severe pain (NRS ≥ 7) on the index date.
Nontraumatic joint disorder (27%), back disorder (25%), and osteoarthritis (21%) were the most common MSD diagnoses. Patients entering the cohort in recent years had more concurrent MSD diagnoses and higher NRS scores. The MSD Cohort is a rich resource for collaborative pain-relevant health service research.

Title
Work-related determinants of multi-site musculoskeletal pain among employees in the health care sector

Author/s
Neupane, S Et al

Source
Work 2016 54 3 689-697 DOI: 10.3233/WOR-162320

Abstract
Background: Work-related musculoskeletal pain is a major occupational problem. Those with pain in multiple sites usually report worse health outcomes than those with pain in one site. Objective: This study explored prevalence and associated predictors of multi-site pain in health care sector employees.

Method: Survey responses from 1348 health care sector employees across three organisations (37% response rate) collected data on job satisfaction, work life balance, psychosocial and physical hazards, general health and work ability. Musculoskeletal discomfort was measured across 5 body regions with pain in ≥ 2 sites defined as multi-site pain. Generalized linear models were used to identify relationships between work-related factors and multi-site pain.

Results: Over 52% of the employees reported pain in multiple body sites and 19% reported pain in one site. Poor work life balance (PRR=2.33, 95% CI=1.06–5.14), physical (PRR=7.58, 95% CI=4.89–11.77) and psychosocial (PRR=1.59, 95% CI=1.00–2.57) hazard variables were related to multi-site pain (after controlling for age, gender, health and work ability. Older employees and females were more likely to report multi-site pain.

Conclusion: Effective risk management of work related multi-site pain must include identification and control of psychosocial and physical hazards.

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OCCUPATIONAL ISSUES

Title
Associations between anthropometric characteristics and physical performance in male law enforcement officers: a retrospective cohort study

Author/s
Dawes, James Jay et al

Source

Abstract
Background: Police officers are often required to undertake physically demanding tasks, like lifting, dragging and pursuing a suspect. Therefore, physical performance is a key requirement.

Methods: Retrospective data for 76 male police officers (mean age = 39.42 ± 8.41 years; mean weight = 84.21 ± 12.91 kg) was obtained. Data included anthropometric (skinfolds, estimated percentage body fat, lean body mass and fat mass) and physical performance (1 Repetition Maximum Bench Press, 1-min sit-ups, 1-min push-ups, vertical jump, 300 m run, 1.5 mile run) measures and correlations between anthropometric measurement and fitness score were obtained.

Results: Estimated percentage body fat was significantly (p = .001) and negatively correlated with all performance measures, except sit-ups and 300 m and 1.5 mile run performance. Estimated lean body mass was significantly and positively (p = .001) correlated with push-ups, bench press and vertical jump measures, while increasing estimated fat mass was significantly (p = .001) associated with reduced performance on sit-up, vertical jump, 1.5 mile run and estimated maximal voluntary oxygen uptake.

Conclusions: A targeted approach, going beyond just decreasing percentage body fat to also selectively increasing lean mass, should be applied for optimal improvement in physical fitness performance.
The effect of physical workload and modality of information presentation on cognitive inhibition in highly fit young males

Pankok, C Zahabi, M Zhang, W Kaber, D

IIE transactions on occupational ergonomics and human factors 2016 4 2-3

Occupational applications This study presents an experiment assessing the interaction between physical task load and modality of information presentation on cognitive task performance. Results indicated that males of equivalent high fitness, between the ages of 18 and 25, can perform complex cognitive tasks reliably well while performing a concurrent physical task requiring up to 70% of aerobic capacity. Furthermore, results revealed that participants respond slightly more quickly to visual stimuli than auditory stimuli but are equally adept at inhibiting responses presented via either modality. These results are applicable to the design of information displays for information processing tasks as part of occupations requiring simultaneous worker physical performance, such as soldiers in combat situations, firefighters in emergency rescue, police officers in security patrols on foot, etc.

Background: Many occupations require workers to perform cognitive tasks while concurrently performing a physical task, such as a soldier taking orders while running to a helicopter evacuation point or a firefighter navigating through a burning building. Diverse personal factors have been identified to influence the effect of physical workload on cognitive performance; however, the literature presents some contradictions, and findings appear heavily dependent on participant sample characteristics, physical task type, and cognitive task type.

Purpose: The purpose of this study was to assess the interaction between physical workload and modality of information presentation on performance of a concurrent cognitive task by highly fit young males.

Methods: Twenty-four highly fit males between the ages of 18 and 25 completed the experiment. Participants ran on a treadmill at one of three physical exertion levels (0%, 50%, and 70% of maximal oxygen uptake [VO2max]). Levels were selected based on a previously-defined “optimal range” of 40%–55% VO2max for facilitating concurrent cognitive performance. Participants were exposed to exertion below, within, or above the optimal range for 8 minutes in each trial while concurrently performing a stop-signal task with stimuli presented either visually or aurally. Accuracy, response time, stop-signal reaction time, and perceived cognitive workload were recorded.

Results: Physical exertion level did not appear to have a significant effect on responses with the exception of a decrease in accuracy that approached significance (p < 0.10). Stimulus modality had a significant effect, with higher accuracy, lower response time, and lower stop-signal reaction time occurring with visual stimuli compared to auditory. The modality of the stop signal (an indicator that participants should inhibit a reaction) had no effect on any response. No significant interaction was found between physical exertion level and modality of information presentation on cognitive inhibition.

Conclusions: Highly fit young males, when subjected to an acute bout of exercise requiring 70% VO2max or less and lasting 8 minutes or less, exhibit no negative effects on cognitive inhibition performance, but response time appears faster with visual versus auditory stimuli.
in the CAGE questionnaire were considered to represent situations of abuse and dependence. The magnitude of the associations was estimated by means of logistic regression in invariable and multivariable models. Results: The prevalence of alcohol abuse and dependence was 13.5 %. Positive associations with the following were identified: lower schooling level (incomplete high school: OR 1.77; 95 % CI 1.14-2.74; and elementary education: OR 1.57; 95 % CI 1.10-2.28); current smoking (OR 2.12; 95 % CI 1.47-3.07); non-participation in social activities (OR 1.74; 95 % CI 1.21-2.48); medical diagnosis of three or more diseases (OR 1.57; 95 % CI 1.01-2.42); aggression at work (OR 1.39; 95 % CI 1.01-1.93); and work-related distress (OR 1.85; 95 % CI 1.27-2.71). Workers who did not have children presented a lower chance of alcohol abuse and dependence than did those with children (OR 0.67; 95 % CI 0.45-0.99).

Conclusions: Results of this study point that the urban public transport workers, users of public transport and also pedestrians could be on increased risk of accidents. So considering the importance of this service for all society and the risk involved in this activity, prospective studies are needed to clarify the relationships observed.

Title Factors related to heart rate variability among firefighters
Author/s Jae-Hong Shin Jung-Youb Lee Seon-Hee Yang Mi-Young Lee In-Sung Chung
Abstract Objectives: The aim of this study was to investigate factors associated with heart rate variability in firefighters working in a metropolitan city in South Korea. Methods: Self-administered questionnaires including Korean Occupational Stress Scale (KOSS) as well as surveys collecting socio-demographic characteristics and work-related factors were given to 962 firefighters. After exclusion for missing data, 645 firefighters were included, and analysis of covariance adjusted for the general risk factors and job characteristics were used to assess the relationship between heart rate variability and associated factors. Results: SDNN and RMSSD and were decreased in the area of occupational climate of the group with high job stress (p = 0.027, p = 0.036). HF(ln) was decreased in the area of organizational system and occupational climate of the group with high stress that statistically significant level (p = 0.034, p = 0.043). Conclusions: Occupational climate and organizational system are associated with reduction of heart rate variability. Preventive medical care plans for cardiovascular disease of firefighters through the analysis and evaluation of job stress factors are needed.

Title Job dissatisfaction and the older worker: baseline findings from the health and employment after fifty study
Author/s D’Angelo, S et Al
Source Occupational and environmental medicine 2016 73:512-519 doi: 10.1136/oemed-2016-103591
Abstract Objectives Demographic changes are requiring people to work longer. Labour force participation might be promoted by tackling sources of job dissatisfaction. We aimed to describe the epidemiology of job dissatisfaction in older British workers, to explore which perceptions of work contribute most importantly, and to assess possible impacts on health. Methods Participants aged 50–64 years were recruited from 24 English general practices. At baseline, those currently in work (N=5437) reported on their demographic and employment circumstances, overall job satisfaction, perceptions of their work that might contribute to dissatisfaction, and their general health, mood and well-being. Associations of job dissatisfaction with risk factors and potential health outcomes were assessed cross-sectionally by logistic regression, and the potential contributions of different negative perceptions to overall dissatisfaction were summarised by population attributable fractions (PAFs).

Results Job dissatisfaction was more common among men, below age 60 years, those living in London and the South East, in the more educated and in those working for larger employers. The main contributors to job dissatisfaction among employees were feeling unappreciated and/or lacking a sense of achievement (PAF 55–56%), while in the self-employed, job insecurity was the leading contributor (PAF 79%). Job dissatisfaction was associated with all of the adverse health outcomes examined (ORs of 3–5), as were most of the negative perceptions of work that contributed to overall dissatisfaction.
Conclusions Employment policies aimed at improving job satisfaction in older workers may benefit from focussing particularly on relationships in the workplace, fairness, job security and instilling a sense of achievement.

Factors associated with alcohol abuse and dependence among public transport workers in the metropolitan region of Belo Horizonte.

Cunha, Najla; Giatti, Luana; Assunção, Ada.


**Abstract**

Purpose: Alcohol use may be associated with occupational factors. The objective of this study was to describe the prevalence and identify factors independently associated with alcohol abuse and dependence among urban public workers.

Methods: In this cross-sectional study, a proportional sample of 1607 bus drivers and conductors in three municipalities within the metropolitan region of Belo Horizonte was analyzed (total population: 17,740). Face-to-face interviews were conducted using a digital questionnaire that investigated working conditions and health. Affirmative responses to at least two questions in the CAGE questionnaire were considered to represent situations of abuse and dependence. The magnitude of the associations was estimated by means of logistic regression in invariable and multivariable models.

Results: The prevalence of alcohol abuse and dependence was 13.5%. Positive associations with the following were identified: lower schooling level (incomplete high school: OR 1.77; 95% CI 1.14-2.74; and elementary education: OR 1.57; 95% CI 1.10-2.26); current smoking (OR 2.12; 95% CI 1.47-3.07); non-participation in social activities (OR 1.74; 95% CI 1.21-2.48); medical diagnosis of three of more diseases (OR 1.57; 95% CI 1.01-2.42); aggression at work (OR 1.39; 95% CI 1.01-1.93); and work-related distress (OR 1.85; 95% CI 1.27-2.71). Workers who did not have children presented a lower chance of alcohol abuse and dependence than did those with children (OR 0.67; 95% CI 0.45-0.99).

Conclusions: Results of this study point that the urban public transport workers, users of public transport and also pedestrians could be on increased risk of accidents. So considering the importance of this service for all society and the risk involved in this activity, prospective studies are needed to clarify the relationships observed.

Learning in the workplace: the role of nurse managers

Yen, Margaret Trede, Franziska Patterson, Carmel

*Australian health review* 2016 40 3 286-291 6

**Abstract**

Objective: This research explores Nurse Managers’ (NMs’) influence on workplace learning. The facilitation of staff learning has implications for the role of NMs, who are responsible for the quality and safety of patient care. However, this aspect of their work is implicit and there is limited research in the area.

Methods: This paper discusses the findings from one hospital as part of a broader philosophical hermeneutic study conducted in two public hospitals over a 20-month timeframe. NMs participated in interviews, a period of observation, follow-up interviews and a focus group. Transcribed data was thematically analysed. Eraut’s ‘Two triangle theory of workplace learning’ was used to interpret participants’ accounts of how they facilitated workplace learning.

Findings: The analysis found that NMs worked to positively influence staff performance through learning in three domains: orientating new staff, assessing staff performance and managing underperformance.

Conclusions: This study purports that NMs influence workplace learning in ways that are seldom recognised. A more conscious understanding of the impact of their role can enable NMs to more purposefully influence workplace learning. Such understanding also has implications for the professional preparation of NMs for their role in the context of workplace learning, facilitating learning for change and enabling the advancement of quality and safety in healthcare.
**Title**
Retirement and its consequences for women's health in Australia

**Author/s**
Zhu, R

**Source**
*Social science and medicine* August 2016 163 117-125

**Abstract**
Understanding the health consequences of retirement is important, as many developed countries have already started raising state pension eligibility age, with the intention to induce postponed retirement. This paper estimates the causal effect of retirement on the health outcomes of older women in Australia, utilising the exogenous variation in retirement induced by the change in age eligibility for the Australian Age Pension. Using a sample of 19,185 observations for 3771 women from waves 2001–2011 of the Household, Income and Labour Dynamics in Australia (HILDA) Survey, we show that retirement status has positive and significant effects on women's self-reported health, physical and mental health outcomes. We also find that longer time spent in retirement confers clear additional health benefits. We show that retirement affects physical and mental health in diverse ways and that the estimated positive health effects of retirement are coincidental with increased post-retirement physical activity and reduced smoking. Our finding that retirement can improve health suggests that the welfare losses from working life prolongation policies will be larger than currently though when we include the cost of the foregone health improvements.

**Title**
Upper arm elevation and repetitive shoulder movements: a general population job exposure matrix based on expert ratings and technical measurements

**Author/s**
Dalboge, A et al

**Source**
*Occupational and environmental medicine* 2016 73 553-560 doi:10.1136/oemed-2015-103415

**Abstract**
Objectives We recently constructed a general population job exposure matrix (JEM), The Shoulder JEM, based on expert ratings. The overall aim of this study was to convert expert-rated job exposures for upper arm elevation and repetitive shoulder movements to measurement scales. Methods The Shoulder JEM covers all Danish occupational titles, divided into 172 job groups. For 36 of these job groups, we obtained technical measurements (inclinometry) of upper arm elevation and repetitive shoulder movements. To validate the expert-rated job exposures against the measured job exposures, we used Spearman rank correlations and the explained variance according to linear regression analyses (36 job groups). We used the linear regression equations to convert the expert-rated job exposures for all 172 job groups into predicted measured job exposures. Bland-Altman analyses were used to assess the agreement between the predicted and measured job exposures. Results The Spearman rank correlations were 0.63 for upper arm elevation and 0.64 for repetitive shoulder movements. The expert-rated job exposures explained 64% and 41% of the variance of the measured job exposures, respectively. The corresponding calibration equations were y=0.5%time+0.16×expert rating and y=27°/s+0.47×expert rating. The mean differences between predicted and measured job exposures were zero due to calibration; the 95% limits of agreement were ±2.9% time for upper arm elevation >90° and ±33°/s for repetitive shoulder movements. Conclusions The updated Shoulder JEM can be used to present exposure–response relationships on measurement scales.

**Title**
An exploratory study of the relationship between psychosocial hazard and ambulatory physiological response in higher education employees

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**PSYCHOSOCIAL ISSUES**

**Title**
An exploratory study of the relationship between psychosocial hazard and ambulatory physiological response in higher education employees
As exposure to psychosocial hazard at work represents a substantial risk factor for employee health in many modern occupations, being able to accurately assess how employees cope with their working environment is crucial. As the workplace is generally accepted as being a dynamic environment consideration should be given to the interaction between employees and the acute environmental characteristics of their workplace. The aim of this study was to investigate the effects of both acute demand and chronic work-related psychosocial hazard upon employees through ambulatory assessment of heart rate variability and blood pressure.

**Design/methodology/approach** A within-subjects repeated measures design was used to investigate the relationship between exposure to work-related psychosocial hazard and ambulatory heart rate variability and blood pressure in a cohort of higher education employees. Additionally the effect of acute variation in perceived work-related demand was investigated.

**Findings** Two dimensions of the Management Standards were found to demonstrate an association with heart rate variability; more hazardous levels of “demand” and “relationships” were associated with decreased SDNN. Significant changes in blood pressure and indices of heart rate variability were observed with increased acute demand.

**Originality/value** This is the first attempt to combine the Health and Safety Management Standards Indicator Tool with physiological assessment of employees. The results provide evidence of associations between scores on the indicator tool and ambulatory heart rate variability as well as demonstrating that variation in acute perceived work-related demand is associated with alterations to autonomic and cardiovascular function. This has implications not only for employee health and workplace design but also for future studies employing ambulatory physiological monitoring.

Objectives: Social inequalities in mental health have been observed, but explanations are still lacking. The objectives were to evaluate the contribution of a large set of psychosocial work factors and other occupational exposures to social inequalities in mental health in a national representative sample of employees.

**Methods:** The sample from the cross-sectional national French survey SUMER 2010 included 46,962 employees: 26,883 men and 20,079 women. Anxiety and depression symptoms were measured using the Hospital Anxiety and Depression scale. Occupation was used as a marker of social position. Psychosocial work factors included various variables related to the classical job strain model, psychological demands, decision latitude, social support, and other understudied variables related to reward, job insecurity, job promotion, esteem, working time/hours, and workplace violence. Other occupational exposures of chemical, biological, physical, and biomechanical nature were also studied. Weighted age-adjusted linear regression analyses were performed.

**Results:** Occupational gradients were found in the exposure to most psychosocial work factors and other occupational exposures. Occupational inequalities were observed for depressive symptoms, but not for anxiety symptoms. The factors related to decision latitude (and its sub-dimensions, skill discretion, and decision authority), social support, and reward (and its sub-dimensions, job promotion, job insecurity, and esteem) contributed to explain occupational inequalities in depressive symptoms. Decision latitude played a major role in the explanation. Workplace violence variables contributed among men only. Other exposures of physical and biomechanical nature also displayed significant contributions.

**Conclusions:** Comprehensive prevention policies at the workplace may help to reduce social inequalities in mental health in the working population.
The effectiveness of a convergence dialogue meeting with the employer in promoting return to work as part of the cognitive-behavioural treatment of common mental disorders: a randomized controlled trial

De Weerd, B J et al

Work 2016 54 3 647-655 DOI: 10.3233/WOR-162307

Background: Dialogue between supervisor and employee is of great importance for occupational rehabilitation.

Objective: To evaluate the effectiveness of a convergence dialogue meeting (CDM) of employee, therapist and supervisor aimed at facilitating return to work (RTW) as part of cognitive-behavioural treatment.

Methods: Randomized controlled trial including 60 employees sick-listed with common mental disorders and referred for specialized mental health care. Employees were randomly allocated either to an intervention group (n=31) receiving work-focused cognitive-behavioural therapy plus CDM or a control group (n=29) receiving work-focused cognitive-behavioural therapy without CDM.

Results: The time to first RTW was 12 days shorter (p=0.334) in the intervention group, although full (i.e., at equal earnings as before reporting sick) RTW took 41 days longer (p=0.122) than the control group. The odds of full RTW at the end of treatment were only 7% higher (p=0.910) in the intervention group as compared to the control group.

Conclusions: CDM did not significantly reduce the time to RTW. We recommend that therapists who are trained on CDM focus on barriers and solutions for RTW.

Helping people with a mental illness obtain work: the health optimisation program for employment

Castle, David et al

Australasian psychiatry August 2016 24 4 337-341

Objective: Inclusion in work and education remains problematic for many people with a mental illness. We describe a structured programme – the Health Optimisation Program for Employment – that supported people with a mental illness to gain employment or commence studies.

Method: Twenty hours of the Health Optimisation Program for Employment were delivered to 600 individuals. Participants were asked to complete an evaluation survey encompassing vocational status and ratings of self-efficacy.

Results: Of the 364 participants who completed the baseline assessment, 168 responded to the evaluation survey 6 months after the delivery of the Health Optimisation Program for Employment. Of these, 21.5% had started a new job, while a further 42.8% were either volunteering or studying. Satisfaction with the programme was high and self-efficacy ratings improved significantly over the short term only.

Conclusions: The Health Optimisation Program for Employment requires further evaluation using rigorous scientific methodology but these initial results are encouraging in terms of vocational attainment for people with a mental illness, in the Australian context.

How do general practitioners contribute to preventing long-term work disability of their patients suffering from depressive disorders? a qualitative study.

Sylvain C, Durand MJ, Maillette P, Lamothe L


Background: Depression is a major cause of work absenteeism that general practitioners (GPs) face directly since they are responsible for sickness certification and for supervising the return to work (RTW). These activities give GPs a key role in preventing long-term work disability, yet their practices in this regard remain poorly documented. The objectives of this study were therefore to describe GPs’ practices with people experiencing work disability due to depressive disorders and explore how GPs’ work context may impact on their practices.

Methods: We conducted semi-structured individual interviews with 13 GPs and six mental
healthcare professionals in two sub-regions of Quebec. The sub-regions differed in terms of availability of specialized resources offering public mental health services. Data were anonymized and transcribed verbatim. Thematic analysis was performed to identify patterns in the GPs’ practices and highlight impacting factors in their work context.

Results: Our results identified a set of practices common to all the GPs and other practices that differentiated them. Two profiles were defined on the basis of the various practices documented. The first is characterized by the integration of the RTW goal into the treatment goal right from sickness certification and by interventions that include the workplace, albeit indirectly. The second is characterized by a lack of early RTW-oriented action and by interventions that include little workplace involvement. Regardless of the practice profile, actions intended to improve collaboration with key stakeholders remain the exception. However, two characteristics of the work context appear to have an impact: the availability of a dedicated mental health nurse and the regular provision of clinical information by psychotherapists. These conditions are rarely present but tend to make a significant difference for the GPs.

Conclusions: Our results highlight the significant role of GPs in the prevention of long-term work disability and their need for support through the organization of mental health services at the primary care level.

Weblink

Title Measurement properties of tools measuring mental health knowledge: a systematic review
Author/s Yifeng Wei, Patrick J. McGrath, Jill Hayden, Stan Kutcher
Abstract Background Mental health literacy has received great attention recently to improve mental health knowledge, decrease stigma and enhance help-seeking behaviors. We conducted a systematic review to critically appraise the qualities of studies evaluating the measurement properties of mental health knowledge tools and the quality of included measurement properties. Methods We searched PubMed, PsycINFO, EMBASE, CINAHL, the Cochrane Library, and ERIC for studies addressing psychometrics of mental health knowledge tools and published in English. We applied the COSMIN checklist to assess the methodological quality of each study as “excellent”, “good”, “fair”, or “indeterminate”. We ranked the level of evidence of the overall quality of each measurement property across studies as “strong”, “moderate”, “limited”, “conflicting”, or “unknown”. Results We identified 16 mental health knowledge tools in 17 studies, addressing reliability, validity, responsiveness or measurement errors. The methodological quality of included studies ranged from “poor” to “excellent” including 6 studies addressing the content validity, internal consistency or structural validity demonstrating “excellent” quality. We found strong evidence of the content validity or internal consistency of 6 tools; moderate evidence of the internal consistency, the content validity or the reliability of 8 tools; and limited evidence of the reliability, the structural validity, the criterion validity, or the construct validity of 12 tools. Conclusions Both the methodological qualities of included studies and the overall evidence of measurement properties are mixed. Based on the current evidence, we recommend that researchers consider using tools with measurement properties of strong or moderate evidence that also reached the threshold for positive ratings according to COSMIN checklist

Weblink

Title New paradigm: special post conference issue: towards recovery August 2016
Abstract This edition is a special conference edition following the VICSERV Conference Towards recovery – Hope innovation co-design in May 2016
Weblink

www.comcare.gov.au Ph: 1300 366 979
Title: Psychosocial work environment and retirement age: a prospective study of 1876 senior employees

Author/s: Thorsen, Sannie; Jensen, Per; Bjørner, Jakob

Source: International archives of occupational & environmental health August 2016 89 6 891-900

Abstract: Purpose: Retention of senior employees is a challenge for most developed countries. We aimed to identify psychosocial work environment factors of importance for the retention of older employees by evaluating the association between the psychosocial work environment and voluntary early retirement in a longitudinal study.

Methods: Data about work environment, health, and background factors came from the DANES 2008 questionnaire survey. We followed members of the Danish early retirement scheme for up to 4 years in national registers-focusing on the age range, 60-64 years, where early retirement was possible. We used Cox proportional hazard regression to analyze the rate of early retirement.

Results: The study included 16 psychosocial work environment factors. The following 10 psychosocial factors were significant predictors of early retirement in covariate adjusted analyses: Low job satisfaction, low influence in job, low possibilities for development, low role clarity, perceived age discrimination, low recognition from management, low workplace justice, poor trust in management, poor leadership quality, and poor predictability. No significant association with early retirement was found for work pace, quantitative demands, emotional demands, role conflicts, social community between colleagues, and trust between colleagues.

Conclusion: Older employees with high job satisfaction, influence, possibilities for development, positive management relations, and jobs with no age discrimination remained longer at the labor market. However, we found no evidence that low demands or good relations between colleagues could influence older employees' decision on early retirement.

Title: The relationship between burnout and risk-taking in workplace decision-making and decision-making style

Author/s: Michailidis, E  Banks, AP


Abstract: This study aimed to investigate what decision-making styles might be exhibited by employees who experience burnout. Using a Work Risk Inventory (WRI), developed for this study, which included generic workplace scenarios, it was also explored whether such employees take relatively more risky decisions. Risk was conceptualised as the adoption of decisions that threaten one’s reputation at work, job performance and job security. The mediating effect of the likelihood and seriousness of the consequences of the worst that could happen in each given scenario on the relationships between dimensions of burnout and risk-taking was also tested. A total of 262 employees in various occupations completed an online survey, including measures on burnout, decision-making styles and the WRI. As predicted, dimensions of burnout – exhaustion, cynicism and professional inefficacy – correlated significantly with avoiding decision-making and negatively with rational decision-making. The seriousness of the consequences of the worst-case scenario occurring mediated the relationship between professional inefficacy and risk-taking. In the context of identifying mechanisms by which burnout leads to risky decision-making, the findings suggest that employees’ sense of professional inefficacy determines their risky decision-making. The contribution to theory and implications for practice are discussed.

Title: The role of organizational facilitators in promoting job-related mental health and group service effectiveness: a two-wave analysis

Author/s: Gracia, E et al
Abstract
This study was conducted to test the relationship over time between the healthy states of groups of service-oriented workers and their service effectiveness when their organizations provide facilitators such as training, technical support and autonomy. The study takes healthy states to be a composite of affective-motivational and competent collective states (collective vigour and service competence) and service effectiveness. Service effectiveness was a combination of service quality as assessed by customers and their loyalty intentions. Data from 53 hotels and restaurants in Spain were aggregated from 256 boundary workers (i.e. workers in direct contact with customers) and 530 customers at Time 1 and from 470 customers at Time 2 six months later. Structural equation modelling showed that organizational facilitators at Time 1 were related to the service effectiveness reported by customers at Time 2, and also that there was a relationship between service effectiveness at Time 1 and the healthy states reported by the groups at Time 2. That is, contrary to what is widely believed, there was an influence of performance on well-being.

Title
Work-related wellbeing in UK prison officers: a benchmarking approach

Author/s
Gail Kinman, Andrew Clements, Jacqui Hart

Source
International journal of workplace health management 2016 9 3

Abstract
Purpose: This paper utilises a benchmarking approach to examine the wellbeing of UK prison officers.
Design/methodology/approach: The Health and Safety Executive (HSE) Stress Indicator Tool is widely used in the UK to assess key psychosocial hazards in the workplace encompassing demands, control, support from managers and co-workers, relationship quality, role and change management. This study utilises this approach to examine the extent to which a sample of UK prison officers meets the HSE recommended minimum standards for the management of work-related wellbeing. Levels of mental health and job satisfaction in the sector are also assessed using measures with extensive occupational norms. The psychosocial hazards that make the strongest contribution to mental health and job satisfaction are also considered.
Findings: Respondents reported lower levels of wellbeing for all of the hazard categories than recommended. Moreover, mental health and job satisfaction were considerably poorer among prison officers than other occupational groups within the emergency and security services in the UK. Considerable variation was found in the psychosocial hazards that predicted mental health and job satisfaction.
Practical implications: The high levels of stressors and strains experienced by UK prison officers gives serious cause for concern. Priority areas for interventions to enhance wellbeing in the sector are considered and areas for future research discussed.
Originality/value: This study highlights the wide-ranging benefits of a benchmarking approach to investigating work-related stressors and strains at the sector level.

REHABILITATION

Title
Rehabilitation and return to work: analysis report on EU and member states policies, strategies and programmes: executive summary

Author/s
Belin, A et al

Source
EU-OSHA July 2016

Abstract
This study investigates the systems for rehabilitation/return to work in place in the 28 European Union (EU) Member States, along with the four European Free Trade Association (EFTA) countries. It analyses what factors play a role in the development and implementation of a
rehabilitation/return-to-work system. Finally, it identifies a number of elements of rehabilitation/return-to-work systems in European countries that could be considered as success factors. Safer and healthier work at any age: Analysis report of workplace good practices and support needs of enterprises

Weblink

Title  
Research review on rehabilitation and return to work: report

Author/s 
Vandenbroeck, Sofie

Source  
EU-OSHA

Abstract 
This review is part of a project of the European Agency for Safety and Health at Work (EU-OSHA), initiated by the European Parliament, on the safety and health of older workers. The objective of the review is to provide an up-to-date summary of knowledge regarding vocational rehabilitation and return-to-work systems, programmes and interventions and their different components.

Weblink

Title  
Safer and healthier work at any age: analysis report of workplace good practices and support needs of enterprises

Author/s 
Grundtvig  Gry et al

Source  
EU-OSHA

Abstract 
This study investigates successful and innovative workplace practices for safer and healthier work at any age. The report is intended to provide decision-makers with a better understanding of the practices implemented by companies to address the challenges of an ageing workforce within various national frameworks and circumstances. This study investigates the systems for rehabilitation/return to work in place in the 28 European Union (EU) Member States, along with the four European Free Trade Association (EFTA) countries. It analyses what factors play a role in the development and implementation of a rehabilitation/return-to-work system. Finally, it identifies a number of elements of rehabilitation/return-to-work systems in European countries that could be considered as success factors.

This study investigates successful and innovative workplace practices for safer and healthier work at any age. The report is intended to provide decision-makers with a better understanding of the practices implemented by companies to address the challenges of an ageing workforce within various national frameworks and circumstances. This study investigates the systems for rehabilitation/return to work in place in the 28 European Union (EU) Member States, along with the four European Free Trade Association (EFTA) countries. It analyses what factors play a role in the development and implementation of a rehabilitation/return-to-work system. Finally, it identifies a number of elements of rehabilitation/return-to-work systems in European countries that could be considered as success factors.

Weblink

RETURN TO WORK

Title  
Does medical certification of workers with injuries influence patterns of health service use?

Author/s 
Ruseckaite, Rasa et al

Source  
Work 2016 54 3 669-678 10
Abstract

Background: Among workers with injuries who seek compensation, a general practitioner (GP) usually plays an important role in a person's return to work (RTW) by advising if the worker is unfit for work (UFW), is able to work on alternate (ALT) duties or is fit for work and also providing referrals to other health service providers.

Objective: To examine patterns of health service utilization (HSU) in workers with injuries by condition and type of certificate issued by GP.

Methods: Zero-inflated negative binomial and logistic regressions were conducted for major healthcare services accessed over the 12-month period post-initial medical examination. Services included GP consultations, pharmacy, physiotherapy, occupational rehabilitation and psychology.

Results: The average number of physiotherapy services was greater in workers with musculoskeletal disorders, back pain and fractures. In contrast, the median number of psychological services was greater in mental health conditions (MHC). Workers with ALT certificates were more likely to use GPs, pharmacy and physiotherapy services.

Conclusion: HSU in the 12 months post-initial medical certification varied substantially according to the worker's condition, certificate type, age, gender and residential location. Understanding these factors can facilitate more appropriate resource allocation; strategic thinking on optimal use of particular health services and enables better targeting of particular provider groups for more education on the health benefits of RTW.

Title

Cross-cultural adaptation and validation of the Danish version of the 19-item return-to-work self-efficacy (RTWSE-19) questionnaire

Author/s Momsen, AH et al

Source Scandinavian journal of work and environmental health 2016 42 4 338-345
doi:10.5271/sjweh.3568

Abstract

Objectives: The aim of this study was to perform a cross-cultural adaptation of the return-to-work self-efficacy (RTWSE-19) scale into Danish and test the reliability, validity and responsiveness of the final version.

Methods: The adaptation process followed standard guidelines and the pretest was performed on 40 sickness absence beneficiaries. Tests of reliability, validity and responsiveness of the final version was performed on 782 participants of whom 440 (56%) responded. For the sub- and global scales, internal consistency was evaluated by Cronbach’s alpha and reproducibility using paired t-test and intraclass correlation coefficient (ICC), respectively. Responsiveness was evaluated by paired t-test and the association between RTWSE-19 and job status at ten weeks was tested in a logistic regression model, adjusted for gender, age and baseline job status.

Results: The face validity and reliability of the Danish version of the RTWSE-19 questionnaire were satisfactory. The internal consistency (alpha) for the three subscales ranged from 0.93 to 0.97. A test-retest showed no difference as well as high ICC between scale scores at baseline and one week later. The content validity of the final version was confirmed. High baseline RTWSE-19 level was associated with being at work after ten weeks odds ratio (OR) 3.24, 95% confidence interval (95% CI) 1.48–7.07.

Conclusions: The RTWSE-19 cross-cultural translation to Danish was performed satisfactorily. A modified final version was produced, and the test of the instrument's reliability and validity showed that the psychometric properties of the questionnaire were partly confirmed. The instrument may be useful in rehabilitation practice to guide further assessment, goal setting and RTW decision-making.

Weblink

Title

Effects of graded return-to-work: a propensity-score-matched analysis

Author/s Bethge, M

Source Scandinavian journal of work and environmental health 2016 42 4 273-279
doi:10.5271/sjweh.3562

Abstract

Objectives: Graded work exposure is deemed to have a therapeutic effect. In Germany, graded return-to-work (GRTW) is therefore frequently used following a rehabilitation program if workers...
are still unable to perform full job duties. The aim of the analyses was to determine long-term effects on disability pension and regular employment.

Methods: Analyses were performed with longitudinal administrative data. Patients aged 18–60 years who attended an orthopedic, cardiac, oncological, or psychosomatic rehabilitation between January and June 2007 were eligible to participate in a GRTW scheme. The effects of GRTW were analyzed by a propensity-score-matched comparison of patients with and without GRTW. Outcomes were disability pension rates, regular income, and the duration of receiving welfare benefits due to sickness absence and unemployment up to the end of 2009.

Results: The propensity-score-matched sample comprised 1875 patients on GRTW and 1875 matched controls not undergoing GRTW. The probability of a disability pension was decreased by about 40% among GRTW patients [5.4% versus 8.6%; hazard rate ratio (HR) 0.62, 95% confidence interval (95% CI) 0.49–0.80]. The three-year income (2007–2009) was EUR12,920 higher (95% CI EUR10,054–15,786) in the GRTW group. The duration of receiving welfare benefits due to sickness absence and unemployment was significantly reduced.

Conclusions: Graded work exposure supports labor participation and reduces the risk of permanent work disability.

Weblink

Title
What's gender got to do with it? examining masculinities, health and safety and return to work in male dominated skilled trades

Author/s
Stergiouy-Kita, M et al

Source
Work 2016 54 3 721-733 DOI: 10.3233/WOR-162322

Abstract
Background: Electrical injuries are a common cause of work-related injury in male dominated skilled trades. Objectives: In this study we explored how issues of gender, masculinities and institutional workplace practices shape expectations of men and their choices when returning to work following a workplace electrical injury. Methods: Twelve workers, who suffered an electrical injury, and twelve employer representatives, completed semi-structured interviews. Using thematic analysis we identified key themes related to how masculinities influenced men’s health and safety during the return to work process. Results: Strong identification with worker roles can influence injured workers’ decisions to return to work ‘too early’. A desire to be viewed as a strong, responsible, resilient worker may intersect with concerns about job loss, to influence participants’ decisions to not report safety issues and workplace accidents, to not disclose post-injury work challenges, and to not request workplace supports. Institutionalized workplace beliefs regarding risk, de-legitimization of the severity of injuries, and the valorization of the “tough” worker can further reinforce dominant masculine norms and influence return to work processes and health and safety practices. Conclusions: Workplaces are key sites where gender identities are constructed, affirmed and institutionalized. Further research is warranted to examine how established masculine norms and gendered workplace expectations can influence workplace health and safety in male dominated high risk occupations. Future research should also evaluate strategies that encourage men to discuss post-injury work challenges and request supports when work performance or health and safety issues arise during the return to work process.

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SHIFT WORK

Title
Impact of night-shift works on the prevalence of erosive esophagitis in shipyard male workers

Author/s
Chung, Tae Lee, Jiho Kim, Moon.

Source
International archives of occupational & environmental health August 2016 89 6 961-966 6
Abstract
Purpose: Whether night-shift work is a risk factor for gastroesophageal reflux disease is controversial. The aim of this study was to investigate the association between night-shift work and other factors, and erosive esophagitis.
Methods: A cross-sectional study with 6040 male shipyard workers was performed. Esophagogastroduodenoscopy examination and a survey about night-shift work status, lifestyle, medical history, educational status, and marital status were conducted in all workers. The odds ratios of erosive esophagitis according to night-shift work status were calculated by using the logistic regression model.
Results: The prevalence of erosive esophagitis increased in the night-shift workers [odds ratio, 95 % confidence interval: 1.41 (1.03-1.94)]. According to multiple logistic regression models, night-shift work, obesity, smoking, and alcohol consumption of ≥140 g/week were significant risk factors for erosive esophagitis. By contrast, Helicobacter pylori infection was negatively associated with erosive esophagitis.
Conclusion: Night-shift work is suggested to be a risk factor for erosive esophagitis. Avoidance of night-shift work and lifestyle modification should be considered for prevention and management of gastroesophageal reflux disease.

Title
Night shift work and stomach cancer risk in the mcc-Spain study

Author/s
Gyarmati, G

Source
Occupational and environmental medicine 2016 73:520-527 doi: 10.1136/oemed-2016-103597

Abstract
Objectives Night shift work has been classified as a probable human carcinogen by the International Agency for Research on Cancer, based on experimental studies and limited evidence on human breast cancer risk. Evidence at other cancer sites is scarce. We evaluated the association between night shift work and stomach cancer risk in a population-based case–control study.
Methods A total of 374 incident stomach adenocarcinoma cases and 2481 population controls were included from the MCC-Spain study. Detailed data on lifetime night shift work were collected including permanent and rotating shifts, and their cumulative duration (years). Adjusted unconditional logistic regression models were used in analysis.
Results A total of 25.7% of cases and 22.5% of controls reported ever being a night shift worker. There was a weak positive, non-significant association between ever having worked for at least 1 year in permanent night shifts and stomach cancer risk compared to never having worked night shifts (OR=1.2, 95% CI 0.9 to 1.8). However, there was an inverse 'U' shaped relationship with cumulative duration of permanent night shifts, with the highest risk observed in the intermediate duration category (OR 10–20 years=2.0, 95% CI 1.1 to 3.6) (p for trend=0.19). There was no association with ever having had worked in rotating night shifts (OR=0.9, 95% CI 0.6 to 1.2) and no trend according to cumulative duration (p for trend=0.68).
Conclusion We found no clear evidence concerning an association between night shift work and stomach cancer risk.

Title
Oxidative DNA damage during sleep periods among nightshift workers

Author/s
Bhatti, P

Source
Occupational and environmental medicine 2016 73:537-544 doi:10.1136/oemed-2016-103629

Abstract
Objectives: Oxidative DNA damage may be increased among nightshift workers because of suppression of melatonin, a cellular antioxidant, and/or inflammation related to sleep disruption. However, oxidative DNA damage has received limited attention in previous studies of nightshift work.
Methods: From two previous cross-sectional studies, urine samples collected during a night sleep period for 217 dayshift workers and during day and night sleep (on their first day off)
periods for 223 nightshift workers were assayed for 8-hydroxydeoxyguanosine (8-OH-dG), a marker of oxidative DNA damage, using high-performance liquid chromatography with electrochemical detection. Urinary measures of 6-sulfatoxymelatonin (aMT6s), a marker of circulating melatonin levels, and actigraphy-based sleep quality data were also available. Results: Nightshift workers during their day sleep periods excreted 83% (p=0.2) and 77% (p=0.03) of the 8-OH-dG that dayshift workers and they themselves, respectively, excreted during their night sleep periods. Among nightshift workers, higher aMT6s levels were associated with higher urinary 8-OH-dG levels, and an inverse U-shaped trend was observed between 8-OH-dG levels and sleep efficiency and sleeps duration. Conclusions: Reduced excretion of 8-OH-dG among nightshift workers during day sleep may reflect reduced functioning of DNA repair machinery, which could potentially lead to increased cellular levels of oxidative DNA damage. Melatonin disruption among nightshift workers may be responsible for the observed effect, as melatonin is known to enhance repair of oxidative DNA damage. Quality of sleep may similarly impact DNA repair. Cellular levels of DNA damage will need to be evaluated in future studies to help interpret these findings.

VOCATIONAL REHABILITATION

Title The ecology of work-related injury and illness in Australia
Author/s Athanasou, James A
Source The Australian journal of rehabilitation counselling July 2016 22 01 1-12
Abstract The purpose of this paper is to explore the context of injury and its consequences for the vocational rehabilitation of Australian workers. This report was derived from a secondary analysis of the seventh national survey of Work-Related Injuries by the Australian Bureau of Statistics. This is a stratified, random, multiple household survey of 42,100 private dwellings. Work-related injury affects 1 in every 25 of those who had worked at some time in the last 12 months. There were high probabilities of a workplace injury for those in labouring-type jobs and workers who exceeded 35–39 hours per week. Occupational injury is heterogeneous in nature and but there is clearly a restriction in the range of clientele encountered in rehabilitation. A second implication for professional rehabilitation arises from the type of injury. Work-related injuries in Australia are dominated overwhelmingly by musculoskeletal conditions. Work-related injury is a major cause of disability and there are consistently large numbers of people each year that will be requiring some vocational rehabilitation services

WORK HEALTH AND SAFETY

Title Between two stools: occupational injuries and risk factors for temporary agency workers
Author/s Kristina Håkansson, Tommy Isidorsson
Source International journal of workplace health management 2016 9 3
Abstract Purpose: Research shows that the risk of work-related disorders is higher among temporary agency workers than among other employees. This article describes the working conditions of temporary agency workers and explains which factors contribute towards work-related disorders for this group. Design/methodology/approach: This article is based on a survey responded to by 482 agency workers in Sweden. The dependent variable is the prevalence of work-related disorders. Independent variables include personal characteristics, job characteristics, employment characteristics and temporary agency work characteristics.
Findings: Our study indicates several risk factors: holding a position as a blue-collar worker; being assigned to more physically demanding work tasks and having fewer opportunities to learn new things than client organization employees; lacking training for work tasks; and lacking clarity regarding which work tasks to do during an assignment.

Originality/value: The theoretical implications of this study are related to the dual employment-management relationship in temporary agency work where the temporary work agency and client organization follow different logics. The logic in the employment relationship is to contract temporary agency workers out to client organizations, thus there is no time for formal training. The logic in the management relationship lies in making temporary agency workers profitable as soon as possible, encouraging shortcuts in training and instruction; thus...
Harris et al. provide useful new data for evaluating which occupational hazards are most deadly, and how this has changed over time. They have estimated excess deaths for different occupational groups, presumably exposed to specific hazards, via calculation of proportional mortality ratio (PMRs) (observed vs expected deaths) from death certificates, for causes of death strongly associated with occupations. Excess deaths (observed minus expected) over three study periods (1979–1990, 1991–2000 and 2001–2010) are presented (excess/observed deaths is the attributable fraction (AF) among the exposed). For some causes resulting solely from occupational exposures, there are no expected deaths without exposure, so all observed deaths across all occupations are considered excessive (e.g., asbestosis, coal miner's pneumoconiosis). Among the more striking findings were the drops in excess deaths in exposed occupations from chronic bronchitis/emphysema, and in deaths from injury and poisoning. There are a number of limitations to the method, most of which are noted by the authors.

Change in annual excess deaths over time conflates improved working conditions/lower exposures, fewer people working in specific occupations (and hence fewer deaths), and declining overall mortality in the population over time. To zero in on improved working conditions/lower exposure, it might be best to emphasise the PMR itself, although clearly excess deaths are an important public health measure.
Methods: Two sets of postcards were developed with unique, trackable URLs for the NIOSH Small Business Resource Guide. One set was distributed by firefighters; the other was mailed to small businesses. Participating inspectors were met with to discuss their experience.

Results: Neither distribution method resulted in a substantial number of site visits. Inspectors believed distributing postcards was an easy addition to their duties, and saw value in safety information.

Conclusions: There are barriers beyond awareness of availability that prevent small business owners from seeking OSH information. Research should focus on identifying barriers and developing better OSH information diffusion mechanisms.

Title

IgA nephropathy in a laboratory worker that progressed to end-stage renal disease: a case report.

Author/s

Bokki Min et al

Source


Abstract

Background: IgA nephropathy (IgAN) is the most common form of glomerulonephritis, a principal cause of end-stage renal disease (ESRD) worldwide. The mechanisms of onset and progression of IgAN have not been fully revealed, and epidemiologic studies have yielded diverging opinions as to the role of occupational exposure to organic solvents in the initiation or worsening of IgAN. As the authors encountered a laboratory worker with IgAN that progressed to ESRD, we present a case report of IgAN progression due to dichloromethane exposure along with a review of literature. Case presentation: A 41-year-old male laboratory worker began to experience gross painless hematuria after two years of occupational exposure to toluene. Although clinical follow-up was initiated under the impression of IgAN based on clinical findings, the patient continued to work for four more years in the same laboratory, during which he was in charge of laboratory analysis with direct exposure to a high concentration of dichloromethane without proper protective equipment. During that time, his renal function rapidly worsened and finally progressed to ESRD 10 years after the first clinical symptoms. The result of exposure assessment through reenactment of his work exceeded the occupational exposure limit for dichloromethane to a considerable degree. Conclusions: The causal association between occupational solvent exposure and IgAN is still unclear; therefore, this case report could be used as a basis to support the relevance of occupational solvent exposure to IgAN and/or its progression. Early intervention as well as close monitoring of laboratory workers exposed to various organic solvents is important to prevent or delay the progression of glomerulonephritis to ESRD in the occupational setting.

Title

Improving performance evaluation of health, safety and environment management system by combining fuzzy cognitive maps and relative degree analysis

Author/s

Kang, J et al

Source

Safety science August 2016 92-100

Abstract

The performance evaluation of health, safety and environment management system (HSE-MS) is considered to be an effective way to eliminate outdated measures and help managers adopt proper rectification measures. The objective of this paper is to design a weight distribution model for HSE-MS performance evaluation, the importance of which stems from the current lack of integrated approaches for interpreting and ranking HSE-MS performance evaluation elements. Initially, Fuzzy Cognitive Maps (FCM) is adopted to illustrate the direct and indirect effects of HSE-MS elements on system performance indicators, and the results of FCM are used to develop leading factors helpful for decision making in an intensive management system. Then, the weight distribution from FCM is amended by Relative Degree Analysis (RDA), the aim of which is to combine the advantages of quantitative and qualitative knowledge-driven methods. Finally, the level of HSE-MS performance is obtained and analyzed. The whole performance evaluation framework highlights the potential correlations of evaluation elements as well as expert opinions, which will improve the reasonability of the HSE-MS performance evaluation.
Improving safety climate through a communication and recognition program for construction: a mixed methods study

Sparer, EH et al

Environmental journal of work and environmental health 2016 42 4 329-337
http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4948113/

Objectives: This study aimed to evaluate the efficacy of a safety communication and recognition program (B-SAFE), designed to encourage improvement of physical working conditions and hazard reduction in construction.

Methods: A matched pair cluster randomized controlled trial was conducted on eight worksites (four received the B-SAFE intervention, four served as control sites) for approximately five months per site. Pre- and post-exposure worker surveys were collected at all sites (N=615, pre-exposure response rate of 74%, post-exposure response rate of 88%). Multi-level mixed-effect regression models evaluated the effect of B-SAFE on safety climate as assessed from surveys. Focus groups (N=6–8 workers/site) were conducted following data collection. Transcripts were coded and analyzed for thematic content using Atlas.ti (version 6).

Results: The mean safety climate score at intervention sites, as measured on a 0–50 point scale, increased 0.5 points (1%) between pre- and post-B-SAFE exposure, compared to control sites that decreased 0.8 points (1.6%). The intervention effect size was 1.64 (3.28%) (P-value=0.01) when adjusted for month the worker started on-site, total length of time on-site, as well as individual characteristics (trade, title, age, and race/ethnicity). At intervention sites, workers noted increased levels of safety awareness, communication, and teamwork compared to control sites.

Conclusions: B-SAFE led to many positive changes, including an improvement in safety climate, awareness, teambuilding, and communication. B-SAFE was a simple intervention that engaged workers through effective communication infrastructures and had a significant, positive effect on worksite safety.

Keywords: B-SAFE, communication, construction, construction industry, construction worker, hazard control, health and safety, mixed method, mixed-method study, recognition, safety, safety climate, safety incentive program, safety intervention

Modelling antecedents of safety compliance: incorporating theory from the technological acceptance model

Hu, X et al

Safety science August 2016 87 292-298 http://dx.doi.org/10.1016/j.ssci.2015.12.018

Research into the technology acceptance model (TAM) and safety performance was used to develop a model in which perceived organizational and supervisor support for safety affect employees' compliance with a risk-awareness safety procedure via cognitive–motivational mechanisms. Cross-sectional survey data were collected from 374 employees of a large Australian mining company. Results of path analysis show that both perceived organizational safety support and perceived supervisor safety support influenced compliance with the risk-awareness procedure, although through different cognitive–motivational processes. Perceived organizational safety support was significantly associated with compliance via perceived usefulness of the risk-awareness procedure. On the other hand, perceived supervisor safety support was significantly related to compliance via safety motivation. The implications for theory and practice are discussed.
Promoting safety participation through diversity and inclusion climates

Author/s: Anna Paolillo, Silvia A. Silva, Margherita Pasini

Source: *International journal of workplace health management* 2016 9 3

Abstract: Purpose: This paper aimed to investigate the impact of diversity climate and inclusion climate on safety participation behaviors through the mediating effect of the motivation to actively promote safety at work.

Design/methodology/approach: Participants were 491 workers employed in four Italian metal-mechanical companies. They completed a paper questionnaire containing measures of psychological diversity climate, psychological inclusion climate, safety motivation participation and safety participation behaviors. Data were analyzed with structural equation modeling.

Findings: Results showed that safety participation motivation fully mediates the relationship between diversity climate and safety participation behaviors, whereas it partially mediates the relationship between climate for inclusion and safety participation behaviors.

Practical implications: The present findings can help managers to motivate employees in pursuing safety goals independently of compensation or obligation by creating an organization in which the main concern is caring for each other's wellbeing.

Originality/value: This is the first study which has empirically tested the relationships between diversity climate, inclusion climate and safety behaviors. It has extended previous research which simply tested the effects of objective types of diversity on safety performance.

Safety cost management in construction companies: a proposal classification

Author/s: Lopez-Alonzo, M et al

Source: *Work* 2016 54 3 617-630 DOI: 10.3233/WOR-162319

Abstract: Background: Estimating health and safety costs in the construction industry presents various difficulties, including the complexity of cost allocation, the inadequacy of data available to managers and the absence of an accounting model designed specifically for safety cost management. Very often, the costs arising from accidents in the workplace are not fully identifiable due to the hidden costs involved.

Objective: This paper reviews some studies of occupational health and safety cost management and proposes a means of classifying these costs.

Methods: We conducted an empirical study in which the health and safety costs of 40 construction worksites are estimated.

Results: A new classification of the health and safety cost and its categories is proposed: Safety and non-safety costs.

Conclusions: The costs of the company's health and safety policy should be included in the information provided by the accounting system, as a starting point for analysis and control. From this perspective, a classification of health and safety costs and its categories is put forward.

Working for the environment and against safety: how compliance affects health and safety on board ships

Author/s: Akamangwa, N

Source: *Safety science* August 2016 131-143 doi:10.5271/sjweh.3569

Abstract: Objectives: This study aimed to evaluate the efficacy of a safety communication and recognition program (B-SAFE), designed to encourage improvement of physical working conditions and hazard reduction in construction.

Methods: A matched pair cluster randomized controlled trial was conducted on eight worksites (four received the B-SAFE intervention, four served as control sites) for approximately five months per site. Pre- and post-exposure worker surveys were collected at all sites (N=615, pre-
exposure response rate of 74%, post-exposure response rate of 88%). Multi-level mixed effect regression models evaluated the effect of B-SAFE on safety climate as assessed from surveys. Focus groups (N=6–8 workers/site) were conducted following data collection. Transcripts were coded and analyzed for thematic content using Atlas.ti (version 6).

Results: The mean safety climate score at intervention sites, as measured on a 0–50 point scale, increased 0.5 points (1%) between pre- and post-B-SAFE exposure, compared to control sites that decreased 0.8 points (1.6%). The intervention effect size was 1.64 (3.28%) (P-value=0.01) when adjusted for month the worker started on-site, total length of time on-site, as well as individual characteristics (trade, title, age, and race/ethnicity). At intervention sites, workers noted increased levels of safety awareness, communication, and teamwork compared to control sites.

Conclusions: B-SAFE led to many positive changes, including an improvement in safety climate, awareness, teambuilding, and communication. B-SAFE was a simple intervention that engaged workers through effective communication infrastructures and had a significant, positive effect on worksite safety.

WORK STRESS

Exploring resilience and mindfulness as preventative factors for psychological distress, burnout and secondary traumatic stress among human service professionals

Harker, R et al

Work 2016 54 3 631-637 DOI: 10.3233/WOR-162311

Background: Human service professionals are concerned with the intervention and empowerment of vulnerable social populations. The human service industry is laden with employment-related stressors and emotionally demanding interactions, which can lead to deleterious effects, such as burnout and secondary traumatic stress. Little attention has been given to developing knowledge of what might enable human service workers to persist and thrive. Cultivating and sustaining resilience can buffer the impact of occupational stressors on human service professionals. One of the psychological factors associated with cultivating resilience is mindfulness.

Objective: The aim of this current research is to improve our understanding of the relationship between resilience, mindfulness, burnout, secondary traumatic stress, and psychological distress among human service professionals.

Methods: The current study surveyed 133 human service professionals working in the fields of psychology, social work, counseling, youth and foster care work to explore the predictive relationship between resilience, mindfulness, and psychological distress.

Results: The results showed that higher levels of resilience were a significant predictor of lower levels of psychological distress, burnout and secondary traumatic stress. In addition, higher levels of mindfulness were a significant predictor of lower levels of psychological distress and burnout. Conclusions: The findings suggest that cultivating resilience and mindfulness in human service professionals may assist in preventing psychological distress, burnout and secondary traumatic stress. Limitations of this study are discussed together with implications for future research.

Work-related boredom and depressed mood from a daily perspective: the moderating roles of work centrality and need satisfaction

Van Hooff, M et al

Work & stress 2016 30 3 209-227

This study aimed to advance insight into inter- and intrapersonal processes that may affect the associations between work-related boredom and employee well-being. We employed a daily perspective to examine (1) the relations between work-related boredom and depressed mood at
the end of the workday and at the end of the evening after work; (2) whether these relations were stronger for employees with high work centrality (the importance of work to the individual); and (3) whether the indirect association between work-related boredom and depressed mood in the evening (via depressed mood at the end of the workday) was smaller on days during which employees’ basic psychological needs were satisfied after work. Data were collected by means of a 5-day diary study among 106 employees in various occupations in The Netherlands. The results showed that work-related boredom was positively related to both depressed mood at the end of the workday and depressed mood in the evening, but only for employees with high work centrality. Furthermore, daily need satisfaction after work mitigated the indirect relation between work-related boredom and depressed mood in the evening. Based on these findings it can be concluded that work centrality and need satisfaction should be taken into account in order to understand the association between work-related boredom and employee well-being.

Weblink

Title Work-related stress management between workplace and occupational health care
Author/s Kinnunen-Amoroso, M Liira, J
Source Work 2016 54 3 507-515 DOI: 10.3233/WOR-162317
Abstract Background: Work-related stress has been evaluated as one of the most important health risks in Europe. Prevention of work related stress and interventions to reduce risk factors for stress in the workplace are conducted together by the enterprise and occupational health services. Objective: The aim of the study was to examine the experiences of Finnish occupational physicians on the stress management with enterprises. Methods: From the Finnish Association of Occupational Health Physicians membership list 207 physicians responded to self-administered anonymous questionnaire. The data were analysed using SPSS 17.0. Results: The client enterprises contacted occupational health services frequently about work-related stress. Collaboration between occupational health and enterprises was strongest in companies’ own occupational health services and generally with most experienced physicians. Occupational health services and enterprises shared responsibility for managing work-related stress. Conclusions: Professional experience and close contact with organisation management favours successful stress management between occupational health and enterprises

Weblink

Title Your work may be killing you! workaholism, sleep problems and cardiovascular risk
Author/s Marisa Salanova et al
Source Work & stress 2016 30 3 http://dx.doi.org/10.1080/02678373.2016.1203373
Abstract This study tests the relationships between workaholism (i.e. working excessively and compulsively), sleep problems and cardiovascular risk in 537 employees from five Spanish hospitals. Four types of worker (i.e. workaholics, positive workers, compulsive workers and hard workers) were distinguished, and their health indicators were compared. The results showed that workaholics experienced significantly more sleep problems (i.e. morning tiredness, sleeping while driving and sleeping fewer hours both on weekdays and at weekends, with poorer quality), had higher relative risk scores, and consumed more caffeine and alcohol than the other patterns of worker (positive, compulsive and hard workers). Further analyses revealed that sleep problems fully mediated the relationship between workaholism (i.e. working excessively and compulsively) and cardiovascular risk. The study emphasizes the fact that being a workaholic might be a significant risk factor for having sleep problems and cardiovascular disease.

Weblink

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WEBSITES

OECD Health statistics

http://www.oecd.org/health/health-data.htm

The online database OECD Health Statistics 2016 has been released on June 30. The OECD Health Database offers the most comprehensive source of comparable statistics on health and health systems across OECD countries. It is an essential tool to carry out comparative analyses and draw lessons from international comparisons of diverse health systems.

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