IWH Research Alert
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*Premji S, Kosny A, Yanar B, and Begum M. Tool for the meaningful consideration of language barriers in qualitative health research. Qualitative Health Research. 2019; [Epub ahead of print].
https://doi.org/10.1177/1049732319856303
Abstract: Individuals who experience language barriers are largely excluded as participants from health research, resulting in gaps in knowledge that have implications for the development of equitable policies, tools, and strategies. Drawing on the existing literature and on their collective experience conducting occupational health research in contexts of language barriers, the authors propose a tool to assist qualitative researchers and representatives from funding agencies and ethics review boards with the meaningful consideration of language barriers in research. There remain gaps and debates with respect to the relevant ethical and methodological guidance set forth by funding agencies and institutions and proposed in the scientific literature. This article adds to knowledge in this area by contributing our experiences, observations, and recommendations, including around the issue of conducting research in contexts of more or less linguistic diversity

*Sandhu HK, Abraham C, Alleyne S, Balasubramanian S, Betteley L, Booth K, Carnes D, Furlan AD, et al. Testing a support programme for opioid reduction for people with chronic non-malignant pain: the I-WOTCH randomised controlled trial protocol. BMJ Open. 2019; 9(8):e028937.
https://doi.org/10.1136/bmjopen-2019-028937   [open access]
Abstract: Introduction Chronic non-malignant pain has a major impact on the well-being, mood and productivity of those affected. Opioids are increasingly prescribed to manage this type of pain, but with a risk of other disabling

symptoms, when their effectiveness has been questioned. This trial is designed to implement and evaluate a patient-centred intervention targeting withdrawal of strong opioids in people with chronic pain. Methods and analysis A pragmatic, multicentre, randomised controlled trial will assess the clinical and cost-effectiveness of a group-based multicomponent intervention combined with individualised clinical facilitator led support for the management of chronic non-malignant pain against the control intervention (self-help booklet and relaxation compact disc). An embedded process evaluation will examine fidelity of delivery and investigate experiences of the intervention. The two primary outcomes are activities of daily living (measured by Patient-Reported Outcomes Measurement Information System Pain Interference Short Form (8A)) and opioid use. The secondary outcomes are pain severity, quality of life, sleep quality, self-efficacy, adverse events and National Health Service (NHS) healthcare resource use. Participants are followed up at 4, 8 and 12 months, with a primary endpoint of 12 months. Between-group differences will indicate effectiveness; we are looking for a difference of 3.5 points on our pain interference outcome (scale 40 to 77). We will undertake an NHS perspective cost-effectiveness analysis using quality adjusted life years. Ethics and dissemination Full approval was given by Yorkshire & The Humber - South Yorkshire Research Ethics Committee on 13 September, 2016 (16/YH/0325). Appropriate local approvals were sought for each area in which recruitment was undertaken. The current protocol version is 1.6 date 19 December 2018. Publication of results in peer- reviewed journals will inform the scientific and clinical community. We will disseminate results to patient participants and study facilitators in a study newsletter as well as a lay summary of results on the study website. Trial registration number ISRCTN49470934; Pre-results

Aasdahl L, Pape K, Vasseljen O, Johnsen R, and Fimland MS. Improved expectations about length of sick leave during occupational rehabilitation is associated with increased work participation. Journal of Occupational Rehabilitation. 2019; 29(3):475-482.
https://doi.org/10.1007/s10926-018-9808-4

Abstract: Objectives To assess changes in participants' expectations about length of sick leave during Acceptance and Commitment Therapy (ACT)-based occupational rehabilitation, and whether the change in expectations was associated with future work participation. Methods Cohort study with 9 months follow-up including sick listed workers who took part in one of two randomized controlled trials. The change in expectations about length of sick leave were assessed using a test of marginal homogeneity. Furthermore, linear and logistic regression evaluated associations between changes in expectations and sustainable return to work (RTW) and work participation days. Results During rehabilitation, there was a statistically significant improvement in participants' (n = 168) expectations about length of sick leave. During 9 months follow-up, participants with consistently positive expectations had the highest probability of RTW (0.81, 95% CI 0.67-0.95) and the most work participation days (159, 95%

CI 139-180). Participants with improved expectations had higher probability of sustainable RTW (0.68, 95% CI 0.50-0.87) and more work participation days (133, 95% CI 110-156) compared to those with reduced (probability of RTW: 0.50, 95% CI 0.22-0.77; workdays: 116, 95% CI 85-148), or consistently negative expectations (probability of RTW: 0.23, 95% CI 0.15-0.31; workdays: 93, 95% CI 82-103). Conclusions During ACT-based occupational rehabilitation, 33% improved, 48% remained unaltered, and 19% of the participants reduced their expectations about RTW. Expectations about RTW can be useful to evaluate in the clinic, and as an intermediary outcome in clinical trials. The changes were associated with future work outcomes, suggesting that RTW expectations is a strong predictor for RTW

Duchemin T, Bar-Hen A, Lounissi R, Dab W, and Hocine MN. Hierarchizing determinants of sick leave: insights from a survey on health and well-being at the workplace. Journal of Occupational & Environmental Medicine. 2019; 61(8):e340-e347.
https://doi.org/10.1097/JOM.0000000000001643
Abstract: OBJECTIVE: We hierarchized a range of individual and occupational factors impacting the occurrence of very short (1-3 days), short (4 days to 1 month), or long-term (more than a month) sick leave spells. METHODS: Data were collected from a repeated cross-sectional survey conducted in the French private sector over the period 2011 to 2017. Fifty one sick leave determinants were ranked using a conditional random forest approach. RESULTS: The main determinants of long-term sick leaves were mainly health-related characteristics, such as perceived health, but also work-related covariates such as supervisor acknowledgment. On the contrary, very short-term spells were mainly defined by sociodemographic covariates. CONCLUSION: These results could be useful for devising appropriate actions to prevent against sick leave at the workplace, particularly long-term spells. Random forest approach is a promising approach for ranking correlated covariates from large datasets

Fales JL, Ladd BO, and Magnan RE. Pain relief as a motivation for cannabis use among young adult users with and without chronic pain. Journal of Pain. 2019; 20(8):908-916.
https://doi.org/10.1016/j.jpain.2019.02.001
Abstract: This study aims to determine the rate of chronic pain in a community sample of young adult cannabis users, assess the extent to which pain relief is an important motivation for cannabis use, and explore differences in consumption patterns and problem behaviors between users with and without chronic pain. The study design was cross-sectional. Self-selected community-dwelling young adults (ages 18-29 years; n=143) who regularly use cannabis completed an online survey. Results revealed that approximately 40% of the sample met the criteria for chronic pain, and pain relief was their primary motivation for use. There were no differences between groups with respect to frequency of use or estimated potency of their preferred strains; however, users with chronic pain

reported using a wider variety of administration methods and a greater quantity of cannabis with each use. Users with chronic pain also reported more extensive histories of use, with younger age at initiation and longer duration of regular use. Despite riskier consumption patterns, there were no between-group differences in negative consequences owing to use after controlling for gender and educational status. On average, the total sample reported approximately 8 problems in the past 30 days owing to use. These findings suggest that chronic pain is commonly experienced among young adult cannabis users and pain relief is the primary motivation for users with pain. For some users, clinically significant chronic pain and pain-related interference persist despite heavy use. Cannabis users with and without chronic pain report experiencing several negative consequences owing to their use. PERSPECTIVE: This article compares motivations for cannabis use and describes differences in consumption patterns among a community sample of young adult users with and without chronic pain. This information may be useful for providers who assess and treat pain in young adults, particularly in settings that have legalized recreational use

Karkkainen R, Saaranen T, and Rasanen K. Return-to-work coordinators' practices for workers with burnout. Journal of Occupational Rehabilitation. 2019; 29(3):493-502.
Abstract: Introduction Return-to-work (RTW) coordinators facilitate RTW of workers with work disabilities. However, little is known about RTW coordinators' practices for workers with burnout. The aims of this study were to describe RTW coordinators' activities in supporting workers with burnout during the RTW process, and their experiences with factors influencing the support. Methods Interviews and essay assignments were conducted with 15 RTW coordinators employed in universities and central hospitals in Finland. Data were analyzed using qualitative content analysis. Results RTW coordinators were involved in the RTW process during early intervention, off-work, and work resumption phases. Seven groups of activities were identified: monitoring staff well-being; initiating RTW process; planning RTW; providing tools to support recovery; monitoring progress of the RTW process; supporting re-engagement with work; and monitoring coping with work. RTW coordinators' activities depended on their institutional positions. Factors influencing the support included common understanding about burnout syndrome: co-occurring illnesses, dimensions of burnout, unpredictability of the recovery, personality characteristics, private life psychosocial factors, conflicts within the work community, and openness about burnout and its causes. Conclusions Complexity of the burnout problem challenges the support from the RTW coordinators. Understanding the causes and the consequences of burnout is important for the RTW coordinators to provide adequate and timely support for the workers with burnout in collaboration with the other stakeholders involved in the RTW process. Burnout-, individual-, and work-related factors should be considered in the RTW coordination to prevent and to reduce the negative consequences of burnout

Ko DH and Jeong BY. Work-related injuries of educational support staff in schools. International Journal of Occupational Safety & Ergonomics. 2019; 25(4):568-574.
https://doi.org/10.1080/10803548.2018.1424299

Abstract: This study aims to describe the characteristics of occupational injuries to educational support staff (service worker) in schools. In this research, 803 injured workers registered in 2015 were analyzed in terms of their gender, age, work experience, school type, work type, accident type, agency of accident, nature of injury and injured part of the body for each occupation. The workers were classified into after-school instructor, custodian and cooking staff. Accidents occurred mainly due to slips (35.6%) on floor/stair or contact with high temperature (18.1%). Also, the workers mostly fractured (41.2%) or had burns (19.3%) on their leg/foot (37.1%) or arm/hand/finger (29.8%). The results showed the difference in characteristics and injury pattern of injured persons for each occupation type, addressing the need for customized preventative measures for each situation. The results of this study can be a baseline in devising policies and guidelines for preventing accidents of service workers in schools

Lambrechts MC, Vandersmissen L, and Godderis L. Alcohol and other drug use among Belgian workers and job-related consequences. Occupational & Environmental Medicine. 2019; 76(9):652-659.
https://doi.org/10.1136/oemed-2019-105690   [open access]

Abstract: OBJECTIVES: This study aimed to obtain prevalence data on use of alcohol and other drugs (AOD) among Belgian workers, and to explore the associations between self-reported AOD use and job-related effects as experienced by workers, and the level of workers' well-being, respectively. METHODS: In this cross-sectional study (2016), 5367 workers filled out a questionnaire including validated instruments such as the Alcohol Use Disorders Identification Test-Consumption (AUDIT-C). Job-related effects were defined as: being late at work, absenteeism, loss of productivity, injuries, conflicts with co-workers and sanctions by employers. Descriptive and multiple logistic regression analyses were performed. RESULTS: Based on AUDIT-C, 39.1% of last year drinkers had an indication of problem drinking. The odds of experienced job-related effects was 3.6 (CI 2.86 to 4.60) times larger than the odds among workers without this indication. This ratio decreased to 3.2 (CI 2.52 to 4.11), controlling for language, gender, family context, level of education and sector. Respondents who used illicit drugs more frequently (>once a month) also had an increased risk for experienced job-related effects (OR 5.8; CI 2.87 to 11.84). Having a low level of well-being increased the risk for job-related effects due to psychoactive medication (OR 2.3, CI 1.10 to 4.91). DISCUSSION: In this study, self-reported AOD use was associated with short-term job-related effects. This suggests that an AOD policy in different sectors is needed with respect for the organisational culture. Its focus should lie on prevention and early detection of AOD problems, and on the mental health of workers. Attention is required for the non-medical use of prescription drugs

Lewis D. Labour market enforcement in the 21st century: should whistleblowers have a greater role? Industrial Relations Journal. 2019; 50(3):256-276.
https://doi.org/10.1111/irj.12251

Liu Y, Guo F, and Hanowski RJ. Assessing the impact of sleep time on truck driver performance using a recurrent event model. Statistics in Medicine. 2019; 38(21):4096-4111.
https://doi.org/10.1002/sim.8287
Abstract: Driver fatigue is a major safety concern for commercial truck drivers and is directly related to the total hours of sleep prior to a working shift. To evaluate changes in driving performance over a long on-duty driving period, we propose a mixed Poisson process recurrent-event model with time-varying coefficients. We use data from 96 commercial truck drivers whose trucks were instrumented with an advanced in situ data acquisition system. The driving performance is measured by unintentional lane deviation events, a known performance deterioration related to fatigue. Driver sleep time and other activities are extracted from a detailed activity register. The time-varying coefficients are used to model the baseline intensity and difference among three cohorts of shifts in which the driver slept less than 7 hours, between 7 to 9 hours, and more than 9 hours prior to driving. We use the penalized B-splines approach to model the time-varying coefficients and an expectation-maximization algorithm with embedded penalized quasi-likelihood approximation for parameter estimation. Simulation studies show that the proposed model fits low and high event rate data well. The results show a significantly higher intensity after 8 hours of on-duty driving for shifts with less than 7 hours of sleep prior to work. The study also shows drivers tend to self-adjust sleep duration, total driving hours, and breaks. This study provides crucial insight into the impact of sleep time on driving performance for commercial truck drivers and highlights the on-road safety implications of insufficient sleep and breaks while driving

Long J and Richter H. The pitfalls of the traditional office ergonomics model in the current mobile work environment: is visual ergonomics health literacy the remedy? Work. 2019; 63(3):447-456.
https://doi.org/10.3233/WOR-192937
Abstract: Mobile technology has revolutionised how we work. It is now relatively easy to work anywhere and anytime, but this has placed the onus is on mobile (or flexible) workers to set up their own work environment for comfort and ease of use. Vision is an important driver of posture, and hence visual ergonomics principles are integral for setting up digital devices. If mobile workers do not have visual ergonomics knowledge, or are unable to apply visual ergonomics knowledge to appropriately set up their work environment, then they are at risk of developing visual-related occupational health issues due to exposure to adverse physical work environments. To address this potential health care issue, we propose the introduction of Visual Ergonomics Health Literacy. This would

provide mobile workers (including school children) with the knowledge and skills to set up their work environment for comfort and ease of use, wherever they work. It is important to address this issue now before we have a widespread epidemic of discomfort and injury from not applying sound visual ergonomics principles to work environments

Minetama M, Kawakami M, Teraguchi M, Kagotani R, Mera Y, Sumiya T, et al. Supervised physical therapy vs. home exercise for patients with lumbar spinal stenosis: a randomized controlled trial. Spine Journal. 2019; 19(8):1310-1318.
https://doi.org/10.1016/j.spinee.2019.04.009

Abstract: BACKGROUND CONTEXT: Exercise has been reported to improve short-term outcomes for patients with LSS in terms of disability and back and leg pain. However, no studies have compared supervised exercise with unsupervised exercise or quantified physical activity using a pedometer to confirm compliance with a home exercise program. PURPOSE: To compare the effectiveness of supervised physical therapy (PT) with unsupervised exercise for patients with lumbar spinal stenosis (LSS). STUDY DESIGN/SETTING: A single-center, open-label, randomized controlled trial. PATIENT SAMPLE: Patients presenting with symptoms of neurogenic claudication caused by LSS, which was confirmed by magnetic resonance imaging. OUTCOME MEASURES: The primary outcome was improvement in symptom severity scores on the Zurich Claudication Questionnaire (ZCQ) at 6 weeks. Secondary outcomes included physical function on the ZCQ, self-paced walking test (SPWT) performance, pain indicated using a numerical rating scale (NRS), and the number of daily steps measured by pedometer. METHODS: Patients with LSS were randomized to a PT group, who performed supervised PT twice a week for 6 weeks, or a home exercise (HE) group. PT sessions included manual therapy, individually tailored stretching and strengthening exercises, cycling, and body weight-supported treadmill walking. RESULTS: Forty-three patients were randomly allocated to the PT group and 43 patients to the HE group. Compared with the HE group, the PT group had greater percentage of responders achieving minimum clinically important difference in ZCQ symptom severity (difference for percentage between groups [95%confidence interval], 30.2% [9.1-48.6], p=.01), ZCQ physical function (32.6% [11.6-50.6], p<.01), walking distance on the SPWT (39.5% [18.8-56.7], p<.01), leg pain on the NRS (34.9% [13.9-52.7], p<.01), and number of daily steps (25.6% [4.9-43.9], p=.01). CONCLUSIONS: Supervised PT for patients with LSS resulted in significant short-term improvements in symptom severity, physical function, walking distance, pain, and physical activity compared with unsupervised exercise

Nishikido N, Sasaki M, Yoshikawa E, and Ito M. Development and evaluation of a training program for occupational health nurses regarding support for workers with cancer and their workplaces. Journal of Occupational Health. 2019; [Epub ahead of print].

[open access]
Abstract: OBJECTIVES: This study aimed to develop and evaluate a training program for occupational health nurses (OHNs) regarding support for workers with cancer and their workplaces. METHODS: Based on our prior research, we engaged in multiple discussions on the development of training program for OHNs. For examining the effectiveness of the developed training program, we collected and analyzed the data from three repeated surveys conducted before, immediately after, and 3 months after the training on self-confidence levels of the participants regarding 23 items associated with support for workers with cancer and their workplaces. RESULTS: We made a 3-hour training program including a lecture and a group work. First, we gave a lecture explaining the support scheme consisting of 4 parts and the 12 hints in action phrase while using the guidebook. Second, we conducted the group work regarding the case of a female worker diagnosed with breast cancer. Of the participants who supported workers with cancer in actuality during the 3-month post-training, 86% acknowledged the utility of the training in implementing support. As for the pre-post evaluation of the training program, most items of the participants' self-confidence significantly increased from pretraining to immediately after and 3 months post-training. DISCUSSION: This study demonstrated that the developed training program was effective in that the participants learned the support schemes and skills and gained self-confidence in implementing supports in real-work settings. We hope that this training program will be extensively used in the future, enabling OHNs to contribute toward balancing cancer treatment and work

Saric F, Barcot O, and Puljak L. Risk of bias assessments for selective reporting were inadequate in the majority of Cochrane reviews. Journal of Clinical Epidemiology. 2019; 112:53-58.
Abstract: OBJECTIVES: The aim of the study was to analyze adequacy of risk of bias (RoB) judgments for selective reporting in Cochrane systematic reviews. STUDY DESIGN AND SETTING: We extracted RoB assessments, including judgment (low, high, or unclear risk) and supporting comment from Cochrane reviews of randomized controlled trials using computer parser. We analyzed sources of information mentioned in supporting comments. We compared judgments of Cochrane authors with guidance from the Cochrane Handbook for Systematic Reviews of Interventions (Cochrane Handbook) and categorized them into adequate or inadequate. RESULTS: At least 60% of judgments for risk of selective reporting bias of trials in analyzed Cochrane reviews were not in line with the Cochrane Handbook. Few Cochrane authors mentioned the trial protocol as a source of data for assessing selective reporting. Most of the inadequate judgments were made among trials that were judged with low risk of selective reporting bias; more than 90%. In 9% of analyzed RoB tables, Cochrane authors did not use this RoB domain at all. CONCLUSION: Cochrane authors frequently make RoB judgments about selective reporting that are not in line with Cochrane Handbook and not mentioning trial protocol. Interventions aimed at helping

Cochrane authors to make adequate RoB assessments in Cochrane reviews would be beneficial

Stratton E, Choi I, Calvo R, Hickie I, Henderson C, Harvey SB, and Glozier N. Web-based decision aid tool for disclosure of a mental health condition in the workplace: a randomised controlled trial. Occupational & Environmental Medicine. 2019; 76(9):595-602.
https://doi.org/10.1136/oemed-2019-105726

Abstract: OBJECTIVES: Making decisions about disclosing a mental illness in the workplace is complicated. Decision aid tools are designed to help an individual make a specific choice. We developed a web-based decision aid to help inform decisions about disclosure for employees. This study aimed to examine the efficacy of this tool. METHOD: We conducted a randomised controlled trial with recruitment, randomisation and data collection all online. Participants had access to the intervention for 2 weeks. Assessments occurred at baseline, postintervention and 6 weeks' follow-up. The primary outcome was decisional conflict. Secondary outcomes were stage and satisfaction of decision-making and mental health symptoms. RESULTS: 107 adult employees were randomised to READY (n=53) or the control (n=54). The sample was predominantly female (83.2%). Participants using READY showed greater reduction in decisional conflict at postintervention (F(1,104)=16.8, p<0.001) (d=0.49, 95% CI 0.1 to 0.9) and follow-up (F(1,104)=23.6, p<0.001) (d=0.61, 95% CI 0.1 to 0.9). At postintervention the READY group were at a later stage of decision-making (F(1,104)=6.9, p=0.010) which was sustained, and showed a greater reduction in depressive symptoms (F(1,104)=6.5, p=0.013). Twenty-eight per cent of READY users disclosed, and reported a greater improvement in mental health than those who did not disclose. CONCLUSIONS: READY provides a confidential, flexible and effective tool to enhance employee's decision-making about disclosure. Its use led to a comparative improvement in depressive symptoms compared with the current information provided by a leading mental health non-governmental organisation, without apparent harm. READY seems worth evaluating in other settings and, if these results are replicated, scaling for wider use. TRIAL REGISTRATION NUMBER: ACTRN12618000229279

Teperi AM, Pajala R, Lantto E, and Kurki AL. Peer-based mental first aid following workplace incidents: implementation evaluation. Journal of Occupational & Environmental Medicine. 2019; 61(8):659-668.
https://doi.org/10.1097/JOM.0000000000001625

Abstract: : The study evaluated the implementation of peer-based Mental First Aid (MFA) in a city organization. Its aim was to examine (1) the participants' user experiences of MFA, (2) the developmental needs of the MFA implementation process, and (3) whether and how the implementation of MFA changed the City's safety management. The data were from interviews, feedback from MFA testing and training, safety management documents, and a survey. MFA became

established in the organization and there was a clear need for it. It was considered easy to use and had a low user threshold. It added value to traditional occupational safety and health practices by improving the participants' own practical skills to systematically manage the human factors of safety. MFA implementation needs clear management structures and a systematic commitment and learning process

Vogazianos P, Petkari E, Arakliti A, Soteriades ES, Antoniades A, and Tozzi F. Work-related psychological distress and its management: the perspective of employees in the financial industry compared with those in human services. Journal of Occupational & Environmental Medicine. 2019; 61(8):e348-e353.
https://doi.org/10.1097/JOM.0000000000001632
Abstract: OBJECTIVE: Investigate psychological distress and its link to stress management interventions in the financial industry (FI) in comparison to the human services (HS) sector. METHOD: Observational study across participating organizations in FI (66) and HS (81). Web-based version of depression anxiety stress scales (21 questions) and eight questions related to stress prevention interventions adopted by employers. RESULTS: Indicated that FI workers are twice as likely as HS employees to present with stress and depression. Differences emerged on the availability of support at the workplace: FI workers reporting total lack of psychological support, although other forms of wellbeing promotion were more frequent. Close to 60% of individuals in the HS group reported no support (48% in the FI). CONCLUSION: Workers in the FI industry have increased levels of workplace stress that could be possibly attributed to absence of prevention interventions at the workplace

Zhao J, Li X, and Shields J. Managing job burnout: the effects of emotion-regulation ability, emotional labor, and positive and negative affect at work. International Journal of Stress Management. 2019; 26(3):315-320.
https://doi.org/10.1037/str0000101;10.1037/str0000101

*IWH authored publications.