IWH Research Alert September 29, 2017

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*Besen E, Jetha A, and Gaines B. Examining the likelihood of experiencing productivity loss and receiving social security disability income following the onset of chronic disease. Journal of Occupational and Environmental Medicine. 2017; [epub ahead of print]. http://dx.doi.org/10.1097/JOM.00000000001159

*Jetha A, Theis KA, Boring MA, and Barbour KE. Education and employment participation in young adulthood. What role does arthritis play? Arthritis Care and Research. 2017; 69(10):1582-1589. http://dx.doi.org/10.1002/acr.23175

Abstract: OBJECTIVES: To examine the association between arthritis diagnosis and educational and employment participation among young adults, and to determine whether findings differ by self-rated health and age. METHODS: Data from the National Health Interview Survey, years 2009 to 2015, were combined and analyzed. Our sample was restricted to those aged 18-29 years either diagnosed with arthritis (n = 1,393) or not (n = 40,537). Prevalence and correlates of employment and educational participation were compared by arthritis status. Demographic characteristics, social role participation restrictions, health factors, and health system use variables were included as covariates. Models were stratified for age (18-23 versus 24-29) and self-rated health. Weighted proportions, univariate, and multivariate associations were calculated to examine the association between arthritis and educational and employment participation. RESULTS: Arthritis respondents were more likely to be female, married, report more social participation restrictions, fair/poor health, and functional limitations than those without arthritis. In multivariate models, arthritis

was significantly associated with lower education (PR = 0.75; 95%CI 0.57-0.98) and higher employment participation (PR = 1.07; 95%CI 1.03-1.13). Additional stratified analyses indicated that the association between arthritis diagnosis and greater employment participation was uncovered for those aged 18-23 years and reporting higher self-rated health. CONCLUSION: Young adults with arthritis may be transitioning into employment at an earlier age than their non-arthritis peers. To inform the design of interventions that promote employment participation, there is a need for future research to better understand the educational and employment experiences of young adults with arthritis. This article is protected by copyright. All rights reserved

*Smith P, Ma H, Glazier RH, Gilbert-Ouimet M, and Mustard C. The relationship between occupational standing and sitting and incident heart disease over a 12-year period in Ontario, Canada. American Journal of Epidemiology. 2017; [epub ahead of print]. http://dx.doi.org/10.1093/aje/kwx298 [open access]

*Williams AM, Tompa E, Lero DS, Fast J, Yazdani A, and Zeytinoglu IU. Evaluation of caregiver-friendly workplace policy (CFWPs) interventions on the health of full-time caregiver employees (CEs): implementation and cost-benefit analysis. BMC Public Health. 2017; 17(1):728.

http://dx.doi.org/10.1186/s12889-017-4722-9 [open access]

Abstract: BACKGROUND: Current Canadian evidence illustrating the health benefits and cost-effectiveness of caregiver-friendly workplace policies is needed if Canadian employers are to adopt and integrate caregiver-friendly workplace policies into their employment practices. The goal of this three-year, three study research project is to provide such evidence for the auto manufacturing and educational services sectors. The research questions being addressed are: What are the impacts for employers (economic) and workers (health) of caregiverfriendly workplace policy intervention(s) for full-time caregiver-employees? What are the impacts for employers, workers and society of the caregiver-friendly workplace policy intervention(s) in each participating workplace? What contextual factors impact the successful implementation of caregiver-friendly workplace policy intervention(s)? METHODS: Using a pre-post-test comparative case study design, Study A will determine the effectiveness of newly implemented caregiverfriendly workplace policy intervention(s) across two workplaces to determine impacts on caregiver-employee health. A quasi-experimental pre-post design will allow the caregiver-friendly workplace policy intervention(s) to be tested with respect to potential impacts on health, and specifically on caregiver employee mental, psychosocial, and physical health. Framed within a comparative case study design, Study B will utilize cost-benefit and cost-effectiveness analysis approaches to evaluate the economic impacts of the caregiver-friendly workplace policy intervention(s) for each of the two participating workplaces. Framed within a comparative case study design, Study C will undertake an implementation analysis of the caregiver-friendly workplace policy intervention(s) in each

participating workplace in order to determine: the degree of support for the intervention(s) (reflected in the workplace culture); how sex and gender are implicated; co-workers' responses to the chosen intervention(s), and; other nuances at play. It is hypothesized that the benefits of the caregiver-friendly workplace policy intervention(s) will include improvements in caregiver-employees' mental, psychosocial and physical health, as well as evidence of cost-benefit and cost-effectiveness for the employer. DISCUSSION: The expected project results will provide the research evidence for extensive knowledge translation work, to be carried out in collaboration with our knowledge transition partners, to the employer/human resources and occupational health/safety target populations. TRIAL REGISTRATION: ISRCTN16187974 Registered August 25, 2016

Alexander D, Hallowell M, and Gambatese J. Precursors of construction fatalities. I: iterative experiment to test the predictive validity of human judgment. Journal of Construction Engineering and Management. 2017; 143(7):04017023.

http://dx.doi.org/10.1061/(ASCE)CO.1943-7862.0001304

Alexander D, Hallowell M, and Gambatese J. Precursors of construction fatalities. II: predictive modeling and empirical validation. Journal of Construction Engineering and Management. 2017; 143(7):04017024. http://dx.doi.org/10.1061/(ASCE)CO.1943-7862.0001297

Ashley J, Cashdollar W, Etcheverry R, and Magill K., editors. Transition back to work: policies to support return to work after illness or injury. For SAW/RTW Policy Collaborative, U.S. Department of Labor, Office of Disability Employment Policy, IMPAQ International, LLC. Columbia, MD: IMPAQ International, LLC; 2017.

Carder M, Hussey L, Money A, Gittins M, McNamee R, Stocks SJ, Sen D, and Agius RM. The health and occupation research network: an evolving surveillance system. Safety and Health at Work. 2017; 8(3):231-236. http://dx.doi.org/10.1016/j.shaw.2016.12.003 [open access] Abstract: Vital to the prevention of work-related ill-health (WRIH) is the availability of good quality data regarding WRIH burden and risks. Physician-based surveillance systems such as The Health and Occupation Research (THOR) network in the UK are often established in response to limitations of statutory, compensation-based systems for addressing certain epidemiological aspects of disease surveillance. However, to fulfil their purpose, THOR and others need to have methodologic rigor in capturing and ascertaining cases. This article describes how data collected by THOR and analogous systems can inform WRIH incidence, trends, and other determinants. An overview of the different strands of THOR research is provided, including methodologic advancements facilitated by increased data quantity/quality over time and the value of the research outputs for informing Government and other policy makers. In doing so, the utility of data

collected by systems such as THOR to address a wide range of research questions, both in relation to WRIH and to wider issues of public and social health, is demonstrated

Chen Y, McCabe B, and Hyatt D. Relationship between individual resilience, interpersonal conflicts at work, and safety outcomes of construction workers. Journal of Construction Engineering and Management. 2017; 143(8):04017042.

http://dx.doi.org/10.1061/(ASCE)CO.1943-7862.0001338 [open access]

Choi HW, Kim YK, Kang DM, Kim JE, and Jang BY. Characteristics of occupational musculoskeletal disorders of five sectors in service industry between 2004 and 2013. Annals of Occupational and Environmental Medicine. 2017; 29:41.

http://dx.doi.org/10.1186/s40557-017-0198-4 [open access] Abstract: BACKGROUND: 'Work related musculoskeletal disorders (WRMSDs)' have been mostly reported in the manufacturing industry but recently the occurrence of industrial injuries has been constantly increasing in the service industry. This research is going to analyze the data about workers' compensation for WRMSDs in five different service sectors and identify characteristics of occupations with the highest approved occupations. METHODS: According to the data released from the Korea Worker's Compensation & Welfare Service, the overview of 12,730 cases of workers' compensation for WRMSDs in five service sectors from 2004 to 2013 is going to be analyzed and the source data is going to be classified by the Korean Standard Classification of Occupations to select the top five occupations that have the highest number of approval. RESULTS: After selecting each five occupations from the service sector that have work related musculoskeletal disorders, the result showed that the occupation with the highest number of approval in the health and social care sector were the early childhood educators, cooks in the school canteens in education services sector, garbage collectors in the sanitation and similar services sector, deliverymen in wholesale and retail, consumer goods repair and building cleaners in general management businesses such as those in building maintenance. The major event observed in the top five occupations was the overexertion and reaction as a cause of WRMSDs. The day when the WRMSDs mostly occurred was on Monday and the most likely time was 10 am. The median days away from work and lost working days are 29-90 days and 0-50 days respectively. The difference in each occupation was observed in year of service, age, and gender. CONCLUSIONS: 83.21% of the approved cases of workers' compensation for WRMSDs occurred in the top 25 occupations in all of the five service sectors, which meant that the approval of workers' compensation is concentrated in specific occupations. This research is going to suggest preventive measures for work related musculoskeletal disorders in the service industry and to help prioritize the preventive measures. TRIAL REGISTRATION: Not applicable

Contandriopoulos D, Benoit F, Bryant-Lukosius D, Carrier A, Carter N, Deber R, and et al. Structural analysis of health-relevant policy-making information exchange networks in Canada. Implementation Science. 2017; 12(1):116.

http://dx.doi.org/10.1186/s13012-017-0642-4 [open access]

Abstract: BACKGROUND: Health systems worldwide struggle to identify, adopt, and implement in a timely and system-wide manner the best-evidence-informedpolicy-level practices. Yet, there is still only limited evidence about individual and institutional best practices for fostering the use of scientific evidence in policymaking processes The present project is the first national-level attempt to (1) map and structurally analyze-quantitatively-health-relevant policy-making networks that connect evidence production, synthesis, interpretation, and use; (2) qualitatively investigate the interaction patterns of a subsample of actors with high centrality metrics within these networks to develop an in-depth understanding of evidence circulation processes; and (3) combine these findings in order to assess a policy network's "absorptive capacity" regarding scientific evidence and integrate them into a conceptually sound and empirically grounded framework. METHODS: The project is divided into two research components. The first component is based on quantitative analysis of ties (relationships) that link nodes (participants) in a network. Network data will be collected through a multi-step snowball sampling strategy. Data will be analyzed structurally using social network mapping and analysis methods. The second component is based on qualitative interviews with a subsample of the Web survey participants having central, bridging, or atypical positions in the network. Interviews will focus on the process through which evidence circulates and enters practice. Results from both components will then be integrated through an assessment of the network's and subnetwork's effectiveness in identifying, capturing, interpreting, sharing, reframing, and recodifying scientific evidence in policy-making processes. DISCUSSION: Knowledge developed from this project has the potential both to strengthen the scientific understanding of how policy-level knowledge transfer and exchange functions and to provide significantly improved advice on how to ensure evidence plays a more prominent role in public policies

Dement JM, Welch LS, Ringen K, Cranford K, and Quinn P. Longitudinal decline in lung function among older construction workers. Occupational and Environmental Medicine. 2017; 74(10):701-708.

http://dx.doi.org/10.1136/oemed-2016-104205

Abstract: BACKGROUND: Occupational exposures to vapours, gasses, dusts and fumes (VGDF) and chest X-ray abnormalities by the International Labour Office (ILO) classification system are associated with reduced lung function, with the majority of published studies being cross-sectional. We examined the effects of VGDF exposures, as well as ILO parenchymal changes, pleural plaque and diffuse pleural thickening (DPT) on reduction in lung function in a longitudinal study. METHODS: Chest radiographs and spirometry for 3150 ageing construction workers enrolled in a medical screening programme with a baseline

and at least one follow-up examination were studied. Indices for VGDF exposure, parenchymal changes, pleural plaque and DPT severity were developed and used in longitudinal mixed models of lung function. RESULTS: Smoking and VGDF exposure were associated with decreased FEV1 and FVC at baseline as well as accelerated rates of annual decline. High VGDF exposure was associated with a yearly decline of -19.5 mL for FEV1 and -15.7 mL for FVC. Parenchymal abnormalities, pleural plaque and DPT were more strongly associated with reduced FVC. An increase of one unit in the pleural plaque severity index resulted in approximately -5.3 mL loss of FVC and -3.3 mL loss of FEV1, with a possible non-linear effect of plaque on FEV1. CONCLUSIONS: Increasing pleural plaque severity was associated with progressively greater loss of FVC and FEV1, supporting a causal association. VGDF exposures were associated with reduced FVC and FEV1 at baseline as well as accelerated annual loss of lung function

Dong L, Agnew J, Mojtabai R, Surkan PJ, and Spira AP. Insomnia as a predictor of job exit among middle-aged and older adults: results from the Health and Retirement Study. Journal of Epidemiology and Community Health. 2017; 71(8):750-757.

http://dx.doi.org/10.1136/jech-2016-208630

Abstract: OBJECTIVES: Poor health is a recognised predictor of workforce exit. but little is known about the role of insomnia in workforce exit. We examined the association between insomnia symptoms and subsequent job exit among middleaged and older adults from the Health and Retirement Study (HRS). METHODS: The study sample consisted of 5746 respondents aged between 50 and 70 who were working for pay when interviewed in the HRS 2004 and were followed up in the HRS 2006. Multinomial logistic regression was used to determine the association between number of insomnia symptoms (0, 1-2, 3-4) and job exit (no exit, health-related exit or exit due to other reasons). RESULTS: In models adjusting for demographic characteristics, baseline health status and baseline job characteristics, compared with respondents with no insomnia symptoms, those with 3-4 insomnia symptoms had approximately twice the odds of leaving the workforce due to poor health (adjusted relative risk ratio=1.93, 95% CI 1.04 to 3.58, p=0.036). There was no association between insomnia and job exit due to non-health reasons. CONCLUSIONS: An elevated number of insomnia symptoms is independently associated with leaving paid employment. Workplace screening for and treatment of insomnia symptoms may prolong labour force participation of middle-aged and older adults

Gimeno Ruiz de Porras D, Rojas Garbanzo M, Aragon A, Carmenate-Milian L, and Benavides FG. Effect of informal employment on the relationship between psychosocial work risk factors and musculoskeletal pain in Central American workers. Occupational and Environmental Medicine. 2017; 74(9):645-651.

http://dx.doi.org/10.1136/oemed-2016-103881



Abstract: INTRODUCTION: The constant increase on the psychosocial demands experienced at work seems to contribute to the increase in health problems such as musculoskeletal pain (MSP). This association may be especially important in low-income and middle-income countries, where there is a large proportion of informal workers among whom there is little research. We analysed the association between psychosocial work risk factors and MSP among formal and informal workers using the First Central American Survey of Working Conditions and Health. METHODS: This is a representative sample (n=12 024) of the economically active population of the six Spanish-speaking countries of Central America. Prevalence ratios (PR) and corresponding 95% CIs from Poisson regression models were used to estimate the association between psychosocial work risk factors and the MSP. RESULTS: Compared with formal workers, informal workers reported higher prevalence of MPS in the body regions analysed (ie, cervicodorsal, lumbosacral, upper extremities) and higher exposure to psychosocial work risk factors. However, on the whole, the associations between the exposure to psychosocial work risk factors and the prevalence of MSP were similar for both formal and informal workers. Only the association between exposure to high demands and MSP in the upper extremities was higher (p=0.012) among formal (PR=1.69, 95% CI 1.46 to 1.96) than among informal workers (PR=1.40; 95% CI 1.30 to 1.51). CONCLUSION: Exposure to adverse levels of psychosocial work risk factors is associated with higher prevalence of MPS among both formal and informal workers. However, the role of employment informality in this association is complex and requires further examination

Halonen JI, Kivimaki M, Vahtera J, Pentti J, Virtanen M, Ervasti J, Oksanen T, and Lallukka T. Childhood adversity, adult socioeconomic status and risk of work disability: a prospective cohort study. Occupational and Environmental Medicine. 2017; 74(9):659-666.

http://dx.doi.org/10.1136/oemed-2017-104319 [open access] Abstract: OBJECTIVES: To examine the combined effects of childhood adversities and low adult socioeconomic status (SES) on the risk of future work disability. METHODS: Included were 34 384 employed Finnish Public Sector study participants who responded to questions about childhood adversities (none vs any adversity, eq. parental divorce or financial difficulties) in 2008, and whose adult SES in 2008 was available. We categorised exposure into four groups: neither (reference), childhood adversity only, low SES only or both. Participants were followed from 2009 until the first period of register-based work disability (sickness absence >9 days or disability pension) due to any cause. musculoskeletal or mental disorders; retirement; death or end of follow-up (December 2011). We ran Cox proportional hazard models adjusted for behavioural, health-related and work-related covariates, and calculated synergy indices for the combined effects. RESULTS: When compared with those with neither exposure, HR for work disability from any cause was increased among participants with childhood adversity, with low SES, and those with both

exposures. The highest hazard was observed in those with both exposures: HR 2.53, 95% CI 2.29 to 2.79 for musculoskeletal disability, 1.55, 95% CI 1.36 to 1.78 for disability due to mental disorders and 1.29, 95% CI 1.20 to 1.39 for disability due to other reasons. The synergy indices did not indicate synergistic effects. CONCLUSIONS: These findings indicate that childhood psychosocial adversity and low adult SES are additive risk factors for work disability

Hellstrom L, Bech P, Hjorthoj C, Nordentoft M, Lindschou J, and Eplov LF. Effect on return to work or education of Individual Placement and Support modified for people with mood and anxiety disorders: results of a randomised clinical trial. Occupational and Environmental Medicine. 2017; 74(10):717-725.

http://dx.doi.org/10.1136/oemed-2016-104248

Abstract: OBJECTIVES: The effect of Individual Placement and Support (IPS) on return to work or education among people with mood or anxiety disorders is unclear, while IPS increases return to work for people with severe mental illness. We examined the effect of IPS modified for people with mood and anxiety disorders (IPS-MA) on return to work and education compared with services as usual (SAU). METHODS: In a randomised clinical superiority trial, 326 participants with mood and anxiety disorders were centrally randomised to IPS-MA, consisting of individual mentor support and career counselling (n=162) or SAU (n=164). The primary outcome was competitive employment or education at 24 months, while weeks of competitive employment or education, illness symptoms and level of functioning, and well-being were secondary outcomes. RESULTS: After 24 months, 44.4% (72/162) of the participants receiving IPS-MA had returned to work or education compared with 37.8% (62/164) following SAU (OR=1.34, 95% CI: 0.86 to 2.10, p=0.20). We found no difference in mean number of weeks in employment or education (IPS-MA 32.4 weeks vs SAU 26.7 weeks, p=0.14), level of depression (Hamilton Depression 6-Item Scale score IPS-MA 5.7 points vs SAU 5.0 points, p=0.12), level of anxiety (Hamilton Anxiety 6-Item Scale score IPS-MA 5.8 points vs SAU 5.1 points, p=0.17), level of functioning (Global Assessment of Functioning IPS-MA 59.1 points vs SAU 59.5 points, p=0.81) or well-being measured by WHO-Five Well-being Index (IPS-MA 49.6 points vs SAU 48.5 points, p=0.83) at 24 months. CONCLUSION: The modified version of IPS, IPS-MA, was not superior to SAU in supporting people with mood or anxiety disorders in return to work at 24 months. TRIAL REGISTRATION NUMBER: NCT01721824

Kang Y, Siddiqui S, Suk SJ, Chi S, and Kim C. Trends of fall accidents in the U.S. construction industry. Journal of Construction Engineering and Management. 2017; 143(8):04017043. http://dx.doi.org/10.1061/(ASCE)CO.1943-7862.0001332

Liu H, Jazayeri E, and Dadi GB. Establishing the influence of owner practices on construction safety in an operational excellence model. Journal of Construction Engineering and Management. 2017;



143(6):04017005.

http://dx.doi.org/10.1061/(ASCE)CO.1943-7862.0001292

Marin LS and Roelofs C. Promoting construction supervisors' safety-efficacy to improve safety climate: training intervention trial. Journal of Construction Engineering and Management. 2017; 143(8):04017037. http://dx.doi.org/10.1061/(ASCE)CO.1943-7862.0001330 [open access]

van der Molen HF, Foresti C, Daams JG, Frings-Dresen MHW, and Kuijer PPFM. Work-related risk factors for specific shoulder disorders: a systematic review and meta-analysis. Occupational and Environmental Medicine. 2017; 74(10):745-755.

http://dx.doi.org/10.1136/oemed-2017-104339

Abstract: The objective of this systematic review and meta-analysis is to examine which work-related risk factors are associated with specific soft tissue shoulder disorders. We searched the electronic databases of Medline and Embase for articles published between 2009 and 24 March 2016 and included the references of a systematic review performed for the period before 2009. Primary crosssectional and longitudinal studies were included when outcome data were described in terms of clinically assessed soft tissue shoulder disorders and at least two levels of work-related exposure were mentioned (exposed vs less or non-exposed). Two authors independently selected studies, extracted data and assessed study quality. For longitudinal studies, we performed meta-analyses and used GRADE (Grades of Recommendations, Assessment, Development and Evaluation) to assess the evidence for the associations between risk factors and the onset of shoulder disorders. Twenty-seven studies met the inclusion criteria. In total, 16 300 patients with specific soft tissue shoulder disorders from a population of 2 413 722 workers from Denmark, Finland, France, Germany and Poland were included in the meta-analysis of one case-control and six prospective cohort studies. This meta-analysis revealed moderate evidence for associations between shoulder disorders and arm-hand elevation (OR=1.9, 95%) CI 1.47 to 2.47) and shoulder load (OR=2.0, 95% CI 1.90 to 2.10) and low to very low evidence for hand force exertion (OR=1.5, 95% CI 1.25 to 1.87), hand-arm vibration (OR=1.3, 95% CI 1.01 to 1.77), psychosocial job demands (OR=1.1, 95% CI 1.01 to 1.25) and working together with temporary workers (OR=2.2, 95% CI 1.2 to 4.2). Low-quality evidence for no associations was found for arm repetition, social support, decision latitude, job control and job security. Moderate evidence was found that arm-hand elevation and shoulder load double the risk of specific shoulder disorders. Low to very-low-quality evidence was found for an association between hand force exertion, hand-arm vibration, psychosocial job demands and working together with temporary workers and the incidence of specific shoulder disorders

Pereira E, Han S, AbouRizk S, and Hermann U. Empirical testing for use of safety related measures at the organizational level to assess and control the on-site risk level. Journal of Construction Engineering and



Management. 2017; 143(6):05017004. http://dx.doi.org/10.1061/(ASCE)CO.1943-7862.0001303

Picot G and Lu Y. Chronic low income among immigrants in Canada and its communities. Analytical Studies Branch Research Paper Series, no. 397. Ottawa, ON: Statistics Canada; 2017.

http://www.statcan.gc.ca/pub/11f0019m/11f0019m2017397-eng.pdf

Robroek SJW, Jarvholm B, van der Beek AJ, Proper KI, Wahlstrom J, and Burdorf A. Influence of obesity and physical workload on disability benefits among construction workers followed up for 37 years. Occupational and Environmental Medicine. 2017; 74(9):621-627.

http://dx.doi.org/10.1136/oemed-2016-104059

Abstract: OBJECTIVES: The objectives of this study are to investigate the relation between obesity and labour force exit via diagnosis-specific disability benefits, and whether physical workload modifies this association. METHODS: A longitudinal analysis was performed among 3 28 743 Swedish construction workers in the age of 15-65 years. Body weight and height were measured at a health examination and enriched with register information on disability benefits up to 37 years later. Diagnoses of disability benefits were categorised into cardiovascular diseases (CVDs), musculoskeletal diseases (MSDs), mental disorders and others. A job exposure matrix, based on self-reported lifting of heavy loads and working in bent forward or twisted position, was applied as a measure of physical workload. Cox proportional hazards regression analyses were performed, and the relative excess risk due to interaction (RERI) between obesity and physical workload was calculated. RESULTS: Obese construction workers were at increased risk of receiving disability benefits (HR 1.70, 95% CI 1.65 to 2.76), mainly through CVD (HR 2.30) and MSD (HR 1.71). Construction workers with a high physical workload were also more likely to receive a disability benefit (HR 2.28, 95% CI 2.21 to 2.34), particularly via MSD (HR 3.02). Obesity in combination with a higher physical workload increased the risk of disability benefits (RERI 0.28) more than the sum of the risks of obesity and higher physical workload, particularly for MSD (RERI 0.44). CONCLUSIONS: Obesity and a high physical workload are risk factors for disability benefit. Furthermore, these factors are synergistic risk factors for labour force exit via disability benefit through MSD. Comprehensive programmes that target health promotion to prevent obesity and ergonomic interventions to reduce physical workload are important to facilitate sustained employment

Rodwell L, Romaniuk H, Nilsen W, Carlin JB, Lee KJ, and Patton GC. Adolescent mental health and behavioural predictors of being NEET: a prospective study of young adults not in employment, education, or training. Psychological Medicine. 2017; [epub ahead of print]. http://dx.doi.org/10.1017/S0033291717002434

Abstract: BACKGROUND: Young adults who are not in employment, education, or training (NEET) are at risk of long-term economic disadvantage and social



exclusion. Knowledge about risk factors for being NEET largely comes from cross-sectional studies of vulnerable individuals. Using data collected over a 10year period, we examined adolescent predictors of being NEET in young adulthood. METHODS: We used data on 1938 participants from the Victorian Adolescent Health Cohort Study, a community-based longitudinal study of adolescents in Victoria, Australia. Associations between common mental disorders, disruptive behaviour, cannabis use and drinking behaviour in adolescence, and NEET status at two waves of follow-up in young adulthood (mean ages of 20.7 and 24.1 years) were investigated using logistic regression, with generalised estimating equations used to account for the repeated outcome measure. RESULTS: Overall, 8.5% of the participants were NEET at age 20.7 years and 8.2% at 24.1 years. After adjusting for potential confounders, we found evidence of increased risk of being NEET among frequent adolescent cannabis users [adjusted odds ratio (ORadj) = 1.74; 95% confidence interval (CI) 1.10-2.75] and those who reported repeated disruptive behaviours (ORadj = 1.71; 95% CI 1.15-2.55) or persistent common mental disorders in adolescence (ORadj = 1.60; 95% CI 1.07-2.40). Similar associations were present when participants with children were included in the same category as those in employment, education, or training. CONCLUSIONS: Young people with an early onset of mental health and behavioural problems are at risk of failing to make the transition from school to employment. This finding reinforces the importance of integrated employment and mental health support programmes

*IWH authored publications.