Despite these obstacles there are approaches to overcoming the hurdles identified, and increasing occupational epidemiology research in developing countries.

Oral Presentation

Policy/Impact

0209

CKDU: INTERVENTION TO POLICY * THIS IS PART OF THE MINI-SYMPOSIUM ORGANISED BY TORD KJELLSTROM

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Background In Mesoamerica CKDu(Chronic Kidney Disease of unknown cause) is epidemic among sugarcane workers and present in other workers. Excessive heat stress and workload are believed to contribute to onset and acceleration of CKDu. The Worker Health and Efficiency (WE) Program is the first evaluated intervention to address excessive heat stress and workload in sugarcane workers. We used the resulting press, political and industry attention to push for a wider agenda of worker protections.

Objectives • Evaluate impact of intervention on patterns of heat illness/dehydration, kidney function, physical workload and productivity.

• Demonstrate need for governments and industry to address CKDu and excessive heat stress in sugarcane- and other workers.

Methods The WE intervention was piloted in two cohorts of workers, one inland and one coastal sugarcane cutters (totaling 117 individuals); thus, allowing assessment of the intervention via self-controls. Concurrently, outreach to industries and governments was conducted to exchange information. Using press and myriad contacts, private and public policy began to rapidly change.

Results Pilot data analysis demonstrated a decrease in heat-related illness, improved hydration, and possibly a stabilisation in kidney function. Marked increase in productivity was also observed. The results drove policy discussions and measurable change in several companies, and the U.S. and Costa Rican Governments.

Conclusion An evidenced-based dialogue between sugar industry farmers, millers, buyers, and governments was created. There are several challenges that remain, and navigating the path to where we are holds valuable lessons for those doing similar work.

Oral Presentation

Reproductive Effects

0212

COMBINED EXPOSURE TO LIFTING AND PSYCHOSOCIAL STRAIN AT WORK AND ADVERSE PREGNANCY OUTCOMES - THE DANISH NATIONAL BIRTH COHORT

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Lifting and high psychosocial strain at work has both been associated with adverse birth outcomes, but no studies have investigated the consequences for pregnancy, when they co-occur. Hence, we aimed to investigate the combined effect of lifting and psychosocial strain at work on pregnancy and foetal growth, using the Danish National Birth Cohort (children born 1996-2002). Women were included if pregnant with singletons at gestational age (GA) 22 and worked ≥ 30 hours/week ($N=47,582$). Work exposures were extracted from an interview at GA 16 (± 3.0). We applied a continuous lifting variable from four questions about heavy and medium lifting, and a psychosocial strain variable, from two questions about demand and influence combined into the four categories of the Demand-Control Model. Pregnancy outcomes were available from the Danish Medical Birth Register: Preterm birth (week 22-36); term birth (week 37-44) but small for GA; term birth but large for GA; and term birth with normal weight (reference group). The overall adjusted multinomial logistic regression analysis showed significant interaction between lifting and job strain with respect to the four outcomes all together ($p=0.007$). Stratified analyses on the psychosocial exposure showed women in the high strain group had an increased risk of preterm birth ($OR=1.04$; 95%-CI 1.01-1.06) and having a child large for GA ($OR=1.04$; 95%-CI 1.01-1.06) for each additional 50 kg lifted. For women in the low strain, passive and active groups, lifting was not associated with the outcomes. Co-occurrence of high strain and lifting seems to increase the risk of adverse birth outcomes.

Oral Presentation

Other

0213

THE IMPACT OF THE NORWEGIAN COOPERATION AGREEMENT ON A MORE INCLUSIVE WORKING LIFE (IA AGREEMENT) ON SICKNESS ABSENCE AND DISABILITY PENSIONING

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