#### **Abstracts**

level (LDSL). Moreover, the correlations of the WLQ-subscales with functional disability and physical health were lower or similar in HDSL participants compared to LDSL participants.

Conclusion This study provides the first evidence that measurement properties of the WLQ-16 may vary by depressive symptom level in workers who returned to work after musculoskeletal disorders. More research is needed to better understand how health-related work functioning measures perform in workers with depressive symptoms.

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### DETERMINANTS OF HEALTH, WORK ABILITY AND SICKNESS ABSENCE: THE INFLUENCE OF LIFESTYLE, WORK-RELATED FACTORS, AND WORK ENGAGEMENT

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Objectives To identify the role of lifestyle factors, work-related factors, and work engagement on health, work ability, and sickness absence.

Methods Employees from two companies were invited to participate in a longitudinal study with questionnaires at baseline and six-month follow-up (n = 612, response: 40%). Lifestyle-related factors (physical activity, fruit and vegetable intake, body mass index), work-related factors (work demands, decision authority, skill discretion, physical job demands), and work engagement were assessed at baseline. At six-month follow-up, health, work ability, and sickness absence were assessed. Logistic regression analyses were performed to identify determinants of ill health, low work ability, and sickness absence. Additionally, additive interaction analyses were performed.

Results A low work engagement at baseline was associated with ill health (OR: 2.02, 95% CI: 1.04–3.92) less than good work ability (OR: 3.51, 95% CI: 2.01–6.12), and sickness absence (short: OR: 1.51, 95% CI: 1.02–2.23, long: OR: 1.79, 95% CI: 0.99–3.24) at follow-up. A lack of vigorous physical activity (ORs 2.46–2.96) and obesity (ORs: 2.34–3.02) at baseline were associated with ill health, low work ability, and long-term sickness absence at follow-up. Frequently working in awkward postures (ORs: 4.85–5.25) was related with a low work ability and long-term sickness absence. Unhealthy lifestyle and unfavourable physical work-related factors were associated with a low work engagement at baseline. The interaction effects of lifestyle or work-related factors and work engagement on work ability were stronger than the sum of the single effects.

Conclusion This study indicates that a low work engagement predicts ill health, a reduced work ability, and sickness absence. Furthermore, employees with an unhealthy lifestyle or unfavourable working conditions a low work engagement have a higher risk on a low work ability than their engaged colleagues. Hence, programs in occupational health should pay attention to both getting employees positively engaged in work and healthy in order to promote a productive work force.

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# WORKING CONDITIONS AND HEALTH IN CENTRAL AMERICA

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Objective To describe the initial results of the first Central American Survey of Working Conditions and Health, completed in 2011.

Methods A cross-sectional survey of a representative national sample of 12,024 workers (2004 per country) was performed in Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama, by completing an interviewer-administered questionnaire in the homes of the participants. Questionnaire items addressed worker demographics, employment conditions, occupational risk factors and self-perceived health.

Results Among the most salient results, women worked mainly in the tertiary sector (78%), while men were distributed between the tertiary (44%) and primary sectors (37%). Over 70% of both women and men were not insured by their country's social security system. Among salaried workers, 24% of women and 20% of men had a written contract, approximately 13% of both had an oral contract and 3% had no contract. About 67% of workers reported having very good or good health status, but at the same time 40% of women and 35% of men self-reported poor mental health. Around 3% of women and 5% of men had sustained an occupational injury in the previous 12 months.

Conclusions In Central America there is a dearth of information on working conditions and health; the available information is generally considered unreliable, of poor quality and scant distribution, especially for the informal sector. The establishment of reliable information systems is a priority for several global health and development programs. Although more detailed analyses are underway, this survey already represents significant progress towards the development of a simple, representative and reproducible regional information system in occupational health and safety that could better inform national and regional planning and assessment, and the creation of public policies directed at preventing occupational risks and promoting the health of both formal and informal workers.

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# OCCUPATIONAL HEALTH SERVICES FOR SMALL-SCALE INDUSTRY WORKERS IN A DISTRICT OF SRI LANKA

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Objectives To describe the provision of occupational health services to workers in small scale industries in a district of Sri Lanka Methods A cross-sectional study was conducted among workers in selected small scale industries in Gampaha district in Sri Lanka. A small scale industry was defined as a work setting with less than 20 workers. The study population consisted of workers in four selected small scale industry categories namely food and beverages, apparel, non metallic mineral products and fabricated metal products. Full time, permanent, workers between the ages of 18-65 years with at least 6 months were selected. Pregnant and temporary workers were excluded. The Census of Industry 2003/2004 was used as the sampling frame. The required sample size was 640 and sampling was done using cluster sampling using probability proportionate to size of workers with a cluster size of eight and 80 clusters. Data was collected using an interviewer administered questionnaire.

Results Out of the total 743 workers, majority were males (71%). Higher proportion of workers (59%) belonged to 20 - 39 year age group. Twenty four percent and 28% of the study population smoked cigarettes and drank alcohol regularly respectively. Only 6% of workers had a pre employment medical examination and periodic medical examinations. Of the workers only 38% were using personal protective equipment. 47% of workers reported that compensation claims were paid for accidents at the factory. 62% of the workers knew how to use a first aid box.

Conclusion The provision of occupational health services to workers in small scale industries is not satisfactory and needs improvement.

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# PERCEPTIONS AND AWARENESS OF RISK IN THE WORKPLACE AMONG MIGRANTS TO AUSTRALIA

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Objectives Migration has been important to the wealth and development of Australia and one in four Australians are born abroad. Our analysis of the national Multi-Purpose Household Survey showed generally higher risks in specific industrial settings but not among migrant workers. Anecdotal evidence, however, suggest that migrant workers are exposed to more workplace hazards. In qualitative interviews we explored perceptions of health and safety and experiences in home countries and in Australia.

Methods 92 purposively sampled migrant workers took part in individual interviews (n = 15) or 8 focus groups (n = 77) from 22 countries (20 from low to middle income countries (LMICs)). Migrants were sampled via migrant organisations, trade unions or via advertisements in the local press. Interviews were digitally recorded, anonymised, and transcribed verbatim. NVivo 10 was used to organise and explore coded transcripts. A concurrent thematic analysis was conducted. Themes around each category were verified and confirmed by constant comparison and searching across all interviews for similar themes and categories for analysis.

Results The key themes that emerged included poor understanding of occupational health and safety, particularly among those from LMICs and even among those with a relatively higher education level; general perception that Australia was a safe place to work in although there were reports of risky practices (e.g. long working hours) and overt discriminatory practices such as racism or bullying in workplaces; and a general resilience towards adversity in workplaces. Social support networks (e.g. via churches) or the commitment to sending remittances to family in home countries played an important role in coping with such adversity. Many tried to explain the racism as humour, and incidents were rarely reported.

Conclusion These findings of a poor understanding of health and safety among migrants from LMICs, shed some light on the context which might result in under-reporting in national surveys.

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OCCUPATIONAL HAZARDS IN SOME SELECTED SMALL SCALE INDUSTRIES IN A DISTRICT OF SRI LANKA

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Occupational hazards in some selected small scale industries in a district of Sri Lanka

Objective To identify occupational hazards in the work environment in small scale industries in a district of Sri Lanka

Method A descriptive cross sectional study was carried out in selected categories of small scale industries namely food and beverages, apparel, non metallic mineral products and fabricated metal products in a district of Sri Lanka. A small scale industry was defined as a work setting with less than 20 workers. A sample of 102 factories was randomly selected using Census of Industries Sri Lanka in 2003/2004. Interviewer administered pre tested checklist was used for data collection.

Results Out of 102, 78.4% (n = 80) of the factories did not have safety signs displayed while machines were properly guarded only in 25 (24.5%) of the factories. The working environment was found to be accident prone in 38.2% (n = 39) of the industries. Lighting was adequate in 93 (91.2%) and noise was found to be excessive in 35 (34.3%) factories.

A functioning safety committee was available in 5 (4.9%) industries while workers trained in occupational safety and first aid, were present only in 18.6% (n = 19) and 23.5% (n = 24) of the factories respectively. Only 24 (23.5%) industries had a protocol developed to act in an emergency situation

Accidents were recorded only in 16 (15.7%) factories. Separate meal room and a changing room were available in 62.7% (n = 64) of the factories.

Conclusion The working environment of small scale industries was found to be unsatisfactory. Detailed studies are warranted to assess the hazards in depth. However, measures should be planned to improve the working environment and health of small scale industry workers since they represent a significant percent of the labour force in Sri Lanka.

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# PREVALENCE OF SELECTED HEALTH ISSUES AMONG WORKERS IN SMALL SCALE INDUSTRIES IN A DISTRICT IN SRI LANKA

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Prevalence of selected health issues among workers in small scale industries in a district in Sri Lanka

Objectives To assess the prevalence of selected health issues among workers, in small scale industries in a district in Sri Lanka

Method A cross sectional study was conducted among workers in four selected small scale industry categories namely food and beverages, apparel, non metallic mineral products and fabricated metal products in a district of Sri Lanka. A small scale industry was defined as a work setting with less than 20 workers. The census of Industries Sri Lanka 2003/2004 was used as the sampling frame. Cluster sampling using probability proportionate to size of the workers was done. Cluster size was eight and eighty clusters were selected. Data was collected using a pre-tested interviewer administered questionnaire.

**Results** Analysis was based on 727 workers. A majority (63.8%, n = 464) were in the age group 20–39 years and 499 (68.6%)