1311

OUTCOMES FOR FACILITATORS THROUGH WORKPLACE ENVIRONMENTAL IMPROVEMENT USING A PARTICIPATORY APPROACH

¹E Yoshikawa*, ²T Yoshikawa, ³K Kogi. ¹Japanese Red Cross College of Nursing, Tokyo, Japan; ²National Institute of Occupational Safety and Health, Kawasaki, Japan; ³The Ohara Memorial Institute for Science of Labour, Tokyo, Japan

10.1136/oemed-2018-ICOHabstracts.1402

Introduction The purpose of this study was to determine changes in awareness, behaviour, and relationships of facilitators who were involved in participatory workplace environment improvement and to examine the outcome components that led to meaningful workplace organisation resulting in workplace environmental improvements through a participatory approach. It is useful to clarify these outcome components in relationship to associations among various factors.

Methods An anonymous self-administered questionnaire survey was conducted for 91 facilitators in three organisations. Valid responses from 79 facilitators (91.9%) were analysed. Changes in awareness, behaviour and relationships as a result of participatory workplace environment improvement were studied. A conceptual framework of the outcome of changes in the overall workplace organisation was set as a tentative model. Exploratory factor analysis was used to determine outcome elements for the facilitators in the participatory process by means of hierarchical regression analysis. This study was approved by the ethics review committee of St. Luke's International University (13-042).

Results Outcomes for facilitators consisted of four sub-concepts corresponding to 'developing self-confidence,' 'improving work-related risk sensitivity,' 'gaining better-than-expected results based on establishing relationships with workers' and 'knowing practical ways and strategies to ensure full participation.' The range of Cronbach's alpha of the subscales was 0.82–0.95. The results of hierarchical regression analysis indicated that sub-concepts of 'knowing practical ways and strategies to ensure full participation' were significantly associated with age ($B = -0.261$, $p = 0.042$), and that 'developing self-confidence' was significantly associated with active participation ($B = 0.348$, $p = 0.006$) and number of improvements ($B = 0.251$, $p = 0.042$).

Conclusion The outcomes revealed confirmed the importance of applying practical ways to secure active participation of workers/managers at the workplace level. These outcomes were associated with satisfaction of improvements based on experiences of these improvements. Supporting satisfaction of improvements in the follow-up activities was considered useful for effective workplace environment improvement.

1332

ISSUES & CHALLENGES FOR OPERATIONALIZING BOHS IN AN UN-ORGANISED LABOUR MARKET, MUMBAI, INDIA

Ganesh K Kulkarni*, R Rajesh, Nikunj Desai, Nandkumar Valanju. *Indian Association of Occupational Health, Mumbai, India*

10.1136/oemed-2018-ICOHabstracts.1403

Introduction The total work force in India is 537.4 Million and 496.4 million (92.38%) work in informal or un-organised sector of economy. There are 22 main listed occupations like agriculture, Building and Construction, Animal Husbandry, Beedi making etc. but there are many unlisted occupations in

India where access to Basic occupational health Service is non-existent. A project initiated by Indian association of Occupational Health to provide BOHS in a labour market in Mumbai in March-April 2017 through an NGO partner. Issues and Challenges in operationalizing BOHS are shared in this presentation.

Methods An NGO partner was identified as operating agency and IAOH as a Technical and resource partner, a walk-through survey was undertaken in a Mumbai un-organised Labour market and observations recorded. A meeting was held with representatives from cross section of un-organised labours to assess the needs of the labour market and create a BOHS action plan with partner NGO.

Results The labour group expressed need for a) First-aid kit and training, b) preventive Tetanus vaccination c) Pragmatic safety solutions. The concept of Minimal Occupational Health Services was thus arrived at that can be upgraded to BOHS later.

Conclusion A project 'Hamara Gala, Suraksha Gala' was envisaged and first-aid training was organised on 2 April 2017. The employer sensitisation was done by NGO partner, IAOH provided financial resources, faculty, training material and first-aid kits to 33 participating labour from different Industrial shops (Galas) that included 4 labour employers. Attendance certificate were issued to all the participants. The major issues were access to BOHS, Employer concerns, Socio-political challenges and disability management. To sustain the program, the NGO partner shall do quarterly inspections and report to IAOH. The vaccination and pragmatic safety are being planned in a phased manner.

1335

A MULTI-DISCIPLINARY INTER-CONTINENTAL COLLABORATION TO BUILD CAPABILITY IN OCCUPATIONAL HEALTH AMONG HEALTH CARE PROFESSIONALS

Inakshi Naik, Ashish Mittal, Robin Nicholas, Mahinda Seneviratne. *Retired, Johannesburg, Gauteng, South Africa*

10.1136/oemed-2018-ICOHabstracts.1404

The interaction between community, environment and the workplace is crucial in the provision of basic health care services in low resource/low income countries. UN's Sustainable development Goals and strategies of agencies WHO and ILO and professional bodies such as ICOH and IALI have highlighted the need for capability building and integration in delivering the necessary services to these communities. However, health care professionals, including medical doctors and nurses undergo limited training in occupational health during their professional undergraduate education.

A series of workshops for health care professionals to develop knowledge and basic skills in workplace hazard identification, assessment and control were conducted in India and Malaysia. The multi-disciplinary program involving occupational medicine, hygiene, ergonomics and hazard communication was delivered by a group of occupational health professionals from four different continents. Their time and resources were provided voluntarily and at no fee or charge for the local organisers.

The workshops consisted primarily of interactive group work facilitated by skilled specialists sharing their international experiences together with demonstration of case studies by

local experts. Diverse local health care workers shared the challenges faced and successes achieved.

The success of these workshops has inspired the volunteers to explore the potential for developing a more sustainable 'academy' for capability building in basic occupational health. This model for a social enterprise in low resource countries through collaborating at international level will be outlined and discussed.

1383 WELDERS FOR WELDERS

¹R Nicholas*, ²T Danielsen, ³A Mittal, ⁴M Seneviratne, ⁵I Naik. ¹Robin Nicholas Communications, Santa Fe, NM, USA; ²Norwegian Labour Inspection Authority, Oslo, Norway; ³Medical Consultancy Services – OHS, New Delhi, India; ⁴SCOHSSEIS, Pennant Hills, Australia; ⁵NIOH South Africa (Formerly), Johannesburg, South Africa

10.1136/oemed-2018-ICOHabstracts.1405

Introduction This program will create a means for welders who are already well-supported and protected in the formal sector, to help welders who are unsupported in the informal sector. Simply, well-protected welders would be able to donate small or large funds and new or used equipment to support the health and safety of unprotected welders.

Methods The primary tool for this program is triage—starting where we are with what we have. The program would bring together safety experts to translate knowledge and culture by listening, asking questions, and advising welders. Then, a form of triage could be developed for each situation, adapting the hierarchy of controls to the available resources and the work culture. In order for this program to succeed, it is essential that the formality of the organisation function well, but not interfere with the person-to-person relationships that are the foundation of this program.

Results The initial program will intentionally start small to allow flexibility and self-evaluation. Based upon the program's experiences, successes, and failures, financial and cultural demands, and the available resources, triage guidelines would be created and shared, defining welder protections from minimal to secondary to ideal. Through the program, others could be trained to make on-site visits, observe existing conditions, and then make and implement recommendations. A case study of welders in India will be provided to illustrate this concept.

Conclusions Ultimately, a health and safety triage template can be developed and made available for others to adapt to their own needs. In the future, 'Welders for Welders' could be applied to other skills in a broader context, perhaps with the creation of 'Workers for Workers.' By bridging two work environments, the proposed Welders for Welders program has the opportunity to promote a community of workers, with welders helping welders.

1440 HEALTH STATUS OF BRICK KILN WORKERS IN NORTH EAST INDIA

¹Ashish Mittal*, ²J John, ²Arati Pandya, ²Ruchi Gupta, ²Anima Debbarma, Sushma¹, Shambhu Yadav. ¹Occupational Health and Safety Management Consultancy Services (OHS-MCS), New Delhi, India; ²Centre for Education and Communication (CEC), New Delhi, India

10.1136/oemed-2018-ICOHabstracts.1406

Introduction India produces 200–250 billion clay bricks annually, the second largest producer of clay fired bricks, accounting for more than 10% of global production, in 1 50 000 to 2 00 000 brick kilns. Each brick kiln employs between 250–300 workers, bringing the total number of workers to approximately 20 million, which is roughly 4 per cent of a total of 459 million workers in India, of which almost 40% are women. The Brick Industry in India is characterised by traditional methods of production technology and seasonal work.

Methods The study was done in Tripura, a state in North East India to assess the impact of traditional brick manufacturing technology on the health of the workers. A convenient available sample of 94 workers from 4 brick kilns who have worked for 5 years or more were taken from the total population of 280 (including children) of these kilns. The workers were interviewed to obtain information on the demography and personal habit followed by general physical medical examination, blood test for complete haemogram, random blood sugar levels and pulmonary function test. The data was analysed using MS Office Excel 2007 & Epi. Info 7.2.1.0 version.

Results The average age of workers is 34 years, 27% were female and 73% male workers. 55% worker are loaders, 29% moulders and 7% fire-workers, 75% being migrant workers, 49% being underweight, 51% anaemic, 78% have eosinophilia (younger workers more affected, p value 0.04), 66% have low back pain.

Conclusion Brick kiln workers are suffering from high morbidity in North east India because of their work. This demands urgent attention for the health and safety program that should include regular in-service training emphasising health risk of brick kiln work, preventive measures, technological interventions etc. Health surveillance of workers would be highly beneficial in achieving better health status.

285 THE SHARING ECONOMY: HAZARDS OF BEING AN UBER DRIVER

¹E MacEachen, ¹E Reid Musson, ¹E Bartel, ¹J Carriere, ¹SB Meyer, ¹S Varatharajan, ²A Kosny, ¹P Bigelow, ²R Saunders. ¹University of Waterloo, Waterloo, Canada; ²Institute for Work and Health, Toronto, Canada

10.1136/oemed-2018-ICOHabstracts.1407

Introduction Uber ride-sharing is an important sharing economy challenge. The taxi industry is notoriously dangerous; even regulated and licensed professional drivers face a homicide rate higher than police officers and first responders. Uber drivers lack special licenses, organised workplaces and other usual safety structures. However, Uber touts different safety features, including feedback and ratings. Our study is focused on understanding the day-to-day work conditions and risks of Uber drivers.

Method We conducted a critical interpretive study of ride sharing with Uber drivers, passengers and management, taxi managers and related policy makers in Ontario, Canada. Data include interviews and focus groups with 50 drivers, passengers, taxi and Uber managers and key informants. These were recorded verbatim, coded and analysed using strategies of coding, indexing and charting in a framework analysis.

Results Uber drivers face unique risks relating to insurance coverage, the driver rating system, financial incentives, and