positive association between a country's proportion of informal jobs and its statistics on productive years of life lost and disability-adjusted life years (DALYs); high burden of disease that affects informal workers.

Discussion The lack of evidence on this subject has been detrimental to the development of sound policies addressing access to health by people-WIE and their families.

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WORKPLACE DESIGN AND WELLNESS PROGRAMME AMONG ARTISANS (INFORMAL WORKERS) IN 'MECHANIC VILLAGE' (AUTOMOBILE REPAIR GARAGES) IN ABEOKUTA, NIGERIA

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Introduction The International Labour Organisation (ILO) showed that informal sector workers in developing countries are exposed to poor working environments, low safety and health standards. Such exposure impairs their health and productivity as well as the general well-being and quality.

Methods The study used the approach in Work Improvement in Small Enterprises (WISE) by ILO and WHO model of Healthy workplace in providing solution to the identified problems of poor working condition and awareness on healthy workplace.

One hundred and thirteen (113) Participants were involved in the study consisting (44) auto mechanic artisans, (27) auto electricians artisans, (7) Motor Vehicle tire repairs artisans, (15) automobile body repair artisans, (8) battery chargers, and (12) food vendors.

The observation of work practice improvement involved using a checklist based on the Work Improvement Small Enterprises (WISE) and the WHO model of Healthy workplace. The checklist consists of the 27 practice improvement sections and including improvements in the: materials storage and handling, work-station design, working conditions, waste disposal, welfare facilities and health promotion. Onsite training was carried by the researchers and stakeholders in Occupational Health and Safety (OHS) within the study area.

Result During the participatory learning activities that were presented in this study, the informal-sector workers engaged in the group discussions and identified the OHS problems in their own sector. They subsequently attempted and accurately understood work related safety issues, and collectively proposed and implemented safety measures. Their awareness on workplace health promotion increase and they were able to identify measures to prevent ill health either at work or at home.

Discussion Our findings suggest that positive attitudes toward promoting safe working conditions and practices can be fostered among the informal-sector workers by raising their

knowledge and skills regarding issues related to OSH through a capacity building process.

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DEVELOPING FACILITATOR TRAINING TOOLKITS BY INTERCOUNTRY NETWORKING FOR ADJUSTING PARTICIPATORY STEPS OF PREVENTING OVERWORKING TO LOCAL SITUATIONS

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Introduction Awareness is growing of the need to effectively promote participatory workplace improvement in different work settings. Newly advancing networked collaboration among occupational health teams in Japan, Korea and other countries in Asia indicate the importance of relying on facilitator training in adjusting participatory programmes to each local situation. It is useful to elucidate effective ways to train facilitators acting in the local context of implementing readily feasible improvements preventing overworking in varied local situations.

Methods Commonly effective procedures for training facilitators acting in participatory action-oriented programmes for preventing overworked situations were reviewed. How the intercountry networking of these experiences contributed to the development of locally adjusted training methods was examined. Attention was paid to simplified procedures and action checklists in training facilitators supporting workers in conducting practical improvements in the local context.

Results The intercountry networking led to annual workshops that confirmed the efficacy of simplified procedures for participatory programmes aimed at locally feasible improvements. These simple procedures proved useful for achieving multifaceted improvements in work methods, physical environment and work organisation. The collaboration of network partners verified the suitability of simple procedures addressing multiple aspects of work. Reflecting this progress, the network partners developed a similarly simple process of facilitator training. The use of a locally adjusted participatory toolkit comprising illustrated good practices and an action checklist of low-cost ideas was consistent. Facilitator training utilising this toolkit in guiding workers thus proved effective in different occupations.

Conclusions Inter-country collaboration in joint development of facilitator training methods in participatory workplace improvement programmes for preventing overworking proved effective. Simplified training procedures were confirmed useful when they emphasised local good practices and facilitation by means of a locally adjusted toolkit. It is recommended to make full use of interactive networking incorporating these training features.

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OUTCOMES FOR FACILITATORS THROUGH WORKPLACE ENVIRONMENTAL IMPROVEMENT USING A PARTICIPATORY APPROACH

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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.

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

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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.

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

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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