Discussion As the exact formation, content and effectiveness of OSH workforce development is not known, a comprehensive evaluation needs to be conducted urgently, as a starting point for effective OSH workforce development. This evaluation will permit the identification of strategies and interventions that can be adopted in Mozambique, including OSH models used in other countries like South Africa, Europe, Brazil and the USA.

1646

WHWB 2 – 'WORKPLACE HEALTH WITHOUT BORDERS – METHODS AND STRATEGIES: PREVENTION OF WORK-RELATED NON-COMMUNICABLE DISEASES IN ECONOMICALLY DEVELOPING COUNTRIES'

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Aim of special session Focusing on the methods, strategies, and opportunities for increasing Occupational Safety, Health, and Hygiene professional access and reducing work-related risks

Presenters: Andrea Hiddinga-Schipper¹, Thomas P Fuller², Jackie Morton³, Ivan Ivanov⁴, David M Zalk⁵

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1646a

OHTA AND IOHA: GROWING OCCUPATIONAL HYGIENE WHERE MOST NEEDED

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Introduction As every 15 s a worker dies from a work-related accident or disease, and every 15 s 153 workers have a work-related accident, the need for more occupational hygiene in the workplace does not need to be discussed. Organisations increasingly seek professionals who can catalyse the processes of promoting and creating a coherent safety culture in the workplace, but it is not always easy to find professionals with the right skills. Looking at the world map, we learn that there is a shortage of competent occupational/industrial hygiene practitioners in Africa, Asia, East Europe and the Middle East. Besides that, there is a restriction on the availability of suitable training in these areas, and particularly on practical training.

Methods Since it is IOHA's mission to enhance the international network of occupational hygiene associations that promotes, develops and improves occupational hygiene worldwide, providing a safe and healthy working environment for all, IOHA felt the need to support a group of experienced hygienists of some multinationals, who took the initiative to set up a training program focused on bringing practical 'hands on' training to those areas in the world where growing occupational hygiene is most needed.

Result The Occupational Hygiene Training Association's (OHTA) – OHLearning.com – started in 2010 and currently has eight courses that can be followed. There is one principles course and seven intermediate courses. Translation of courses is in nine languages. OHTA and IOHA are working together to provide formal recognition of the qualifications delivered by the OHTA training programs.

Discussion OHLearning provides a common occupational hygiene training and career ladder, and facilitates mobility through internationally recognised qualifications. Seven years on, the training is accepted as one of the routes to meeting educational requirements for professional accreditations. This presents some good steps on the road to meet the future needs of occupational hygiene.

1646b

BUILDING OCCUPATIONAL SAFETY AND HEALTH CAPACITY THROUGH GRASSROOTS TRAINING OUTREACH INITIATIVES

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Introduction The status of occupational safety and health (OSH) in Economically Developing Countries (EDCs) continues to lag behind more advanced economies, with resulting excessive levels of workplace injury and illness. Much of the shortfall in OSH practice is due to the shortage of professionals with subject experience, expertise, and education.

Methods Grassroots OSH training initiatives have been coordinated and conducted by the not-for-profit organisation Workplace Health Without Borders (WHWB) in several countries, including Botswana, India, Tanzania, and Viet Nam. Experienced and qualified instructors provided onsite courses from the Occupational Hygiene Training Association (OHTA) OHLearning program. Students that attend these regional courses earn the opportunity to sit for a course examination. Upon receiving a passing grade, the student is awarded a certificate of completion from the internationally recognised qualifications scheme of OHTA.

Results These pilot training courses conducted on location by volunteer professionals serve as models for expansion of the program. Graduates of the program obtain or advance jobs in OSH, and have continued on to complete university degrees. University degrees in addition to certain OHTA certificate criteria have now become qualifications to sit for some OSH professional certifications recognised by the International Occupational Hygiene Association (IOHA).

Discussion This presentation will discuss the development and success of the WHWB outreach OSH training model, and the potential for additional collaboration and training around the world. Lessons learned and solutions to course challenges are presented. Ideas for program expansion will be discussed, including possibilities for future collaboration with other professional organisations such as ICOH.

1646c

UNDERSTANDING INFORMAL SECTOR EXPOSURES AND PREVENTION

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Introduction Work-related disease is a global health and safety challenge that is thought to cause over 2 million deaths worldwide annually. In addition to this, around 160 million people worldwide are estimated to become sick every year from a range of occupational exposures. This does not only affect adults, because 168 million of the world's children are child labourers, half of whom work in hazardous conditions. Dedication to the prevention of occupational disease motivated the creation of the non-profit organisation Workplace Health Without Borders (WHWB). The UK Branch of WHWB was formed in 2016.

Methods WHWB members volunteer their time to offer training, mentoring and technical assistance to develop capacity for preventing occupational disease around the world. Examples include: training, mentoring, projects to prevent exposure to silica dust in agate workers and stone-crushers in India, and in brick plant workers in Nepal, Pakistan and Tanzania. In agate silica exposure reduction, low cost engineering controls using locally available materials are being considered.

Result Practical approaches for the reduction of exposures are necessary; examples will be demonstrated where simple extraction systems and other hygiene measures have been introduced in very challenging workplace exposures. One example of this is the use of locally purchased and built extraction fans for the reduction of agate silica dust exposures in India which have resulted in a 40%–50% reduction in silica dust levels in some cases.

Discussion It is hoped that through education, training, mentoring and raising public awareness that improvements can be made in hazardous workplace exposures across the world. Much can be achieved remotely through online training but more effort and support is required. WHWB-UK is in the early stages of helping with this but with additional funds and support much more can be achieved.

1646d WHOCC AND ICOH: LEVERAGING COLLABORATIONS

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Introduction Global network members of WHO Collaborating Centres for Occupational Health (CCs) assist WHO in implementing the World Health Assembly Resolution 60.26: the Global Plan of Action on Workers' Health, (GPA) 2008–2017. Current activities align with workplan objectives for 2012–2017. Risk assessment, management, control and prevention of noncommunicable diseases (NCDs) are one of seven priority objectives. CCs include 50 centres of excellence in occupational health and three international partners including ICOH. Development and delivery of training and intervention strategies for identification, prevention, and management of occupational risk factors are the best path forward to achieving sustainability and improving conditions within informal and high risk sectors.

Methods WHOCCs conducted a review of CC contributions toward WHO Secretariat in implementing the GPA under the 2006–2012 workplan. Quantitative self-administered questionnaires collected information on outputs from projects

conducted by CCs. Qualitative surveys asked semi-structured questions about views, opinions and ideas regarding CCs.

Result Project leaders from 46 CCs in 28 countries (including ICOH) responded to the quantitative survey. Of 202 responses, 78.7% produced a product and 70.5% indicated another CC/NGO had product participation. Primary product audiences were health professionals, academic researchers, and employers. Products available by weblink or in pdf format will be made accessible through the GeoLibrary. CCs also conducted 143 training courses and materials were available for over 75% of trainings; 25 CCs responded to the qualitative survey. Key themes emerging from data analysis highlighted CCs' strengths, advantages to other networks, external constraints, areas for improvement, new ways of working, utilisation of CC contributions, collaboration among the CCs, and their WHO affiliation.

Discussion WHO and ICOH are major organisations whose work contributes to protecting workers globally. By leveraging collaboration, each brings important perspective and expertise with shared commitments to healthy and safe workplaces. The 2006–2012 review reflected the contributions and reach of these partnerships.

1646e QUALITATIVE STRATEGIES TO SIMPLIFY WORK-RELATED RISK REDUCTION

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Introduction Clear and consistent communication of risk within the Occupational Safety, Health, and Hygiene (OSHH) professions is essential for achieving prevention of work-related diseases. This risk communication must be simplified. It must speak to workers directly, assisting them in identifying work-related hazards and implementing solutions. Controls that assist in preventing the most common work-related diseases are well known to OSHH professionals, yet they remain unknown to 2.5 billion workers. This results in an annual estimate of 2 million deaths from and 160 million incidences of work-related noncommunicable diseases within the global workforce, primarily in Economically Developing Countries (EDCs).

Methods Utilising fundamental Occupational Hygiene principles and Control Banding's qualitative strategy for assessing occupational risks and the selection of solutions, a Risk Level Based Management System (RLBMS) was developed. RLBMS is designed to deliver the most elusive element necessary for success; risk communication within and between OSHH professions. This qualitative occupational risk assessment and risk management strategy has been trialled across chemical, physical, and biological agents in a high regulatory enforcement environment.

Result Initial qualitative risk assessment not only standardises controls, it also prioritises where and when quantitative monitoring needs to be performed. In addition, de-confliction of multidisciplinary controls for an individual task is presented to the workers for simple, clear, and concise guidance on how to reduce risk and achieve exposure prevention on a daily basis. This simple and consistent risk communication was successful for worker understanding and implementation of controls. Further simplifying communications to colours and symbols renders it applicable in EDCs globally.