information. The level of self-efficacy in occupational health surveillance and research increased significantly after the trainings. The highest increase was observed for research skills. Female students scored significantly higher on self-efficacy than men while no effect of age was demonstrated.

Conclusion Feedback on the implemented training programme was generally very favourable and participants were able to acquire competencies in the subject matter. Further details on the project and the different learning materials can be obtained free of charge and under Creative Commons licenses, at the project website http://www.esprit-ohs.eu/en/.

1721 INNOVATIONS IN EDUCATION AND TRAINING IN OSH

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Aim of the session to accelerate development, share and adopt innovative programs, processes and strategies in education in OSH Theodor Valerian Haratau1, Lena Kurtz2, Anna Rask-Andersen5, Hans Thore Smedbo5

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Methods The AGROSH +project, is implemented by a consortium of 5 partners from 4 countries, countries to which agriculture is highly relevant (Bulgaria, Greece, Ireland and Romania), and produced two highly specific training courses dedicated to occupational medicine physicians and to OSH experts.

Results The training courses produced are blended, modular, of 40 hours each, and enclose modules such as musculoskeletal diseases, extreme temperatures, mental health in agriculture, health hazards in agriculture, toxicology, occupational cancer, etc. The courses are accredited, tested and benefit of a highly specific evaluation package based on the comprehensive Kirkpatrick four stages evaluation approach (it analyses the evolution of trainees' knowledge, skills, attitude and behaviour).

Conclusion The agriculture sector it is changing at a pace unseeen before in terms of new chemical substances being used, of new technologies incorporated within classical tools, of climate changes and new environments where it is unfolded. Therefore the training of those experts who are providing their services (occupational medicine and OSH services) to agriculture needs to be performed using a specific and updated curriculum, using highly interactive platforms, using practical activities based on Case Studies, and especially by incorporating multidisciplinary expertise.

1721a TRAINING OCCUPATIONAL MEDICINE PHYSICIANS AND OSH EXPERTS WHO ARE PROVIDING THEIR SERVICES IN AGRICULTURE – AGROSH+

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Introduction Agriculture as a sector has a tremendous impact on the European economy, it account for almost 40% of the EU budget, it is making use of almost 50% of the EU land, and its share of GDP has been increasing almost continuously for the past 5 years.

Nevertheless as the Eurofound (2016), Sixth European Working Conditions Survey has revealed, agriculture it is the least covered sector in terms of OSH. Moreover a research produced by the authors revealed the fact that in most of the EU-28 countries there are no specific training courses, crafted for agriculture, for occupational medicine physicians and for OSH experts.

Methods The AGROSH +project, is implemented by a consortium of 5 partners from 4 countries, countries to which agriculture is highly relevant (Bulgaria, Greece, Ireland and Romania), and produced two highly specific training courses dedicated to occupational medicine physicians and to OSH experts.

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1721b TRAINING IN OCCUPATIONAL SAFETY AND HEALTH: AN EFFECTIVE APPROACH TO FACE OSH CHALLENGES IN LATIN AMERICA

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Introduction In the course of fast economic growth in Latin America, a wide range of production and services have been developed whereas the importance of occupational safety and health (OSH) in these sectors still remain at a low level. To improve this situation well-trained professionals are necessary. Finding a lack of local training we established an education program for OSH professionals from Latin America who might act as regional leaders in OSH training and research (train the trainer model).

Methods Based on a needs assessment, we developed a two-year blended learning Master consisting of onsite courses, project work and interactive online modules. Students receive theoretical and practical training in the assessment of working conditions, research skills and intervention strategies applying modern teaching methods and an international framework.

Results Since 2012, 91 OSH experts from 13 Latin American countries started the Master, 43 of them already graduated. After completing the program, over 80% of the graduates rate their knowledge in the OSH fields taught in the Master as (very) high – compared to only one third before starting the program. Almost all graduates transfer this knowledge to their professional practice – even two years after completing the master. Today the graduates act as multipliers of OSH in their home countries by teaching at local universities, holding responsible positions and forming an international network. Over 70% of the former participants are still in contact at least once per month, realising further research projects, training courses, interventions and scientific publications.
Abstracts

Discussion According to the results, blended learning combined with modern teaching techniques and project work seems to be a successful approach for training in OSH. The participants get empowered to jointly organise own research and learning courses even after finishing the studies. This train the trainer concept might contribute to face OSH challenges in Latin America.

1721c ONLINE COURSE ‘WORK AND TECHNOLOGY ON HUMAN TERMS’ FOR DEVELOPMENT OF SAFER AND HEALTHIER WORKPLACES

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Introduction In collaboration with five Swedish universities of technology, Prevent has produced an online course in English, based on the textbook ‘Work and technology on human terms’ to be used as a modern, highly accessible study material. The purpose is to contribute to safer and healthier workplaces and to improve organisational performance.

The online course targets students at universities who are pursuing degrees in engineering, economics or human relations as well as professionals holding equivalent university degrees.

Methods The production of the online course was organised in a project managed by Prevent and a producer in collaboration with lecturers and researchers at the five universities.

Results The online course was available in August 2017 at www.onhumanterms.org. It’s free of charge, held in English and covers subjects as: Human-Technology-System, Psychosocial and organisational environment, Physical environment, Information and interaction in technical systems, Methods and design processes, and Economic and legal conditions (in Sweden). It also contains workplace cases for practical application of the theory.

Theory and theoretical models are presented using animations supported by interviews with experts and researchers active in the various disciplines. The content is closely linked to different types of businesses, as reflected by company reports and interviews with product developers, managers and safety representatives.

The user is free to start and finish the online course independently of others. The course comprises totally approximately 20 hours of study and the user will get a certificate after finishing the complete course including knowledge tests.

Conclusion A comprehensive and scientifically based work environment online course has been developed and made available on internet free of charge. Prerequisites have been a co-operative project management and broad participation from Swedish universities, an online course producer and Prevent, owned by the parties of the Swedish labour market and providing knowledge for improved work environment.

1721d OUTCOME OF THE POSITIVE TRAINING PROGRAMME FOR IMPROVING WORKING CONDITIONS IN INDIA

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Introduction In accordance with the International Labour Organisation’s Global Strategy on Occupational Safety and Health, it is essential to develop practical training programmes for improving local working conditions in low- and middle-income countries. The Participation-Oriented Safety Improvements by Trade Union Initiative (POSITIVE) programme has involved many workers in developing countries in action-oriented workshops on multifaceted workplace improvements. The programme was introduced in India in collaboration with the Indian National Trade Union Congress (INTUC) and the Japan International Labour Foundation (JILAF). This study aimed to evaluate the effectiveness of the programme.

Methods The POSITIVE workshops were serially held for training trainers selected from trade union members in 13 engineering companies. Subsequently a training-of-trainers (TOT) workshop was conducted in November 2013, and after a re-training workshop of these trainers, the participants conducted a one-day workshop for their co-workers in their workplaces. An evaluation workshop was held in September, 2014. The results of these workshops and the implemented improvements were evaluated.

Results The POSITIVE workshops proved successful in India. In the TOT workshop, 25 participants from 13 factories learned practical ways to plan multifaceted improvements having real impact. The participants conducted a one-day workshop at 15 workplaces training 476 workers. Almost all of the participants answered that the technical sessions of the programme were useful for increasing knowledge and improving their working conditions. After this one-year programme, the participants reported 188 improvements implemented at their own workplaces.

Discussion The POSITIVE training programme was effective for workers in engineering industries to improve their working conditions by using their own ideas in reducing work-related risks. Practical training tools such as the action checklist, group discussion and local good-practice photos were useful for gaining these results. It is suggested that the POSITIVE programme for factory workers can play important roles in improving their workplace conditions.

1721e OCCUPATIONAL LUNG DISEASES ARE PUZZLING

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Introduction Occupational lung diseases are a broad group of diagnoses caused by a wide range of hazards in the workplace.