Report of the Symposium in Zagreb
“Education in OSH, emerging trends and unmet needs”
26-28 October 2017

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A link to this report and to other information about this symposium is to find at www.ldoh.net.

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Introduction

The Symposium *Education in OSH, emerging trends and unmet needs*” was organized in Zagreb, Croatia from 26th until 28th October 2017, by the International Commission on Occupational Health Scientific Committee (ICOH SC) *Education and Training in Occupational Health*, in close collaboration with the SC *Rural Health: Agriculture, Pesticides and Organic Dusts*, and the SC *Effectiveness in Occupational Health Services*. The Symposium was held under the auspices of the Croatian Institute for Health Protection and Safety at Work.

The number of participants was 92, coming from 25 countries spread over all five continents. During the symposium 43 oral presentations were given and 20 posters were presented and discussed.

This symposium wanted to give floor to important issues in education and training and to discussions in areas like agriculture, health care workers, students in vocational schools, education of experts in Occupational Safety and Health (OSH) and effectiveness in both expert-based and basic occupational health care. We wanted to reach out for colleagues in family medicine to discuss opportunities to advance the education of primary health care on the topic of workers’ health.

Representatives from important international organizations and programs were present, joining their efforts with ours by active participation: the International Labor Organization International Training Centre in Turin (ILO ITC), the World Organization of family physicians (WONCA Special Interest Group on Workers’ Health), the European Association of Schools in Occupational Medicine (EASOM), the SACURIMA EU COST funded project on safety culture and risk management in agriculture, and the European Network for Education in Occupational Safety and Health (ENETOSH).

Opening and Session I

The Opening Ceremony took place in the beautiful Palace of the Croatian Academy of Sciences and Arts, thanks to the support by the Academy. With great honor we acknowledge that this symposium was held under the high patronage of the President of the Republic of Croatia, Mrs. Kolinda Grabar – Kitarovic. Prof. dr. sc. Jadranka Mustajbegovic addressed the guests and participants of the symposium on behalf of the President of the Republic of Croatia and prof. dr. sc. Vida Demarin, F.A.C. addressed the assembly on behalf of the President of the Academy. Welcome speeches were held also on behalf of the Croatian Institute for Health Protection and Safety at Work by prim. dr. sc. Ana Bogadi Sare, and the ICOH Scientific Committee Education and Training in Occupational Health by em. prof. Frank van Dijk.

The introductory part was followed by keynote lectures in Opening Session I. The first lecturer, discussing research needs in education, recommended to perform more and better evaluation studies supporting quality, effectiveness and better coverage of education. He advised including evaluation of e- and blended learning, use of smartphones and MOOCs. The international ILO Master program in Occupational Health organized by the ILO ITC in Turin was presented, showing an attractive interdisciplinary and participatory approach. A distance learning phase is followed by a residential phase and a dissertation. Next, an overview was given of occupational medicine in Croatia that has a long tradition. Today the study in Occupational and Sports Medicine is a four year
specialist training as is common in the EU. The final subject was teaching in interdisciplinary team work. Examples were given of e.g. seminars delivered by both occupational physicians and safety experts, as practiced in the Croatian Institute for Health Protection and Safety at Work.

Session II    Round table: Experiences in training health professionals

Current situation and unmet needs around the globe

Eight presenters from all over the world reported in the Round Table session II about the state of the art in their countries and regions, mentioning results, trends and unmet needs. While progress has been made in many countries, still many shortcomings were noticed. Although in South Africa Occupational Health Nurse is a well-organized nurse specialty including education and training programs on different levels, in many countries such an organizational infrastructure does not exist. Almost all informal workers miss social security. In several countries such as in India new initiatives are undertaken to educate primary health care professionals to enable them to offer basic occupational health care for informal workers, farmers, self-employed, workers in small companies and non-paid workers. Agriculture in Australia is covered by regular primary and secondary health care but educational efforts on training in OSH issues are surely needed. Courses and online tools that are developed are impressive.
Huge efforts are made in Japan to improve the education of occupational physicians, stimulated by urgent needs in industry forthcoming from the substantially ageing population seizing as well the working population in coming decades. In China important progress has been made in legislation and in maintaining compliance with the prescriptions. In parts of Europe Occupational Health is struggling for its identity. Large differences between the countries’ regulations and contexts make common solutions not simple. Open discussion may lead to good definitions of competences of OSH disciplines to avoid problems between OSH disciplines and with general practitioners. In the USA there are great shortages of OH physicians and nurses causing serious concerns about the capacities of the training institutions. For Latin America more education in OSH is needed. Good international initiatives are a Central American collaboration program called Saltra, the Bibliotheca Virtual de Salud offering access to scientific literature in three languages and an international Master of Science program in OSH.

Session III  International collaboration

Session III “International collaboration in strengthening capacities in OSH training” gave floor to the presentation of international community efforts in strengthening capacities in needed areas. The first was a project aiming to strengthen the occupational health expertise and scientific capacity of the Public Health Institution of Turkey (PHIT) by organizing trainings, mentoring, exchange visits and networking. The following contribution dealt with the International blended learning Master of Science in OSH program promoting research and teaching in Latin America provided by LMU (Munich, Germany).

The session provided for other successful projects like AGROSH+ developing learning materials and a course for OSH in agriculture, next a Course to improve educational methods in OSH as a response to the challenging question of what makes trainings in OSH to various target groups most effective. Last but not least the session ended with a course exploring Historical Perspectives on OSH that started in 2006 in USA to provide trainees with interdisciplinary, experiential learning opportunities. The course provides the opportunity to visit work places, seeing how workers work, and experiencing occupational hazards and controls. This session was a nice mixture of displayed efforts provided by experienced fellows to empower various target audiences in their need to strengthen own capabilities to manage health protection and safety at work.
Session IV  Education of students and professionals

The session under the title “Education of students and professionals-troubleshooting and how to do it” started with a fair overview of the current situation in undergraduate teaching occupational health to students in the South-East European region. Developments in educating occupational health for undergraduate medical students were highlighted for Macedonia, Croatia and Bosnia Herzegovina. Experts from Belgium, Netherlands and Turkey collaborated in a successful EU ESPrIT program teaching OSH and non-OSH professionals from Turkey in Occupational Health Surveillance practices and in applied research related to workers health surveillance.

Session V  New topics and target groups

In the session “Education of old and new target groups”, the topic Awareness, knowledge and practices regarding occupational hazards and risks were explored. First, risk awareness among medical students was elaborated in Belgium. In South Africa, confronted with a large shortage of health care workers in hospitals, a training module for these workers on occupational and environmental health is developed and evaluated. In Indonesia the development and implementation of a new training module was discussed on diagnosing occupational diseases by family physicians. Finally, focusing on working adults (age 15-49), and referring to the fact that occupational injuries and occupational diseases are the prime cause of early disability (Years Lived with Disability) and loss of income in e.g. Indonesia (ahead of alcohol, smoking, high blood glucose or high BMI), exploring one important question is more than relevant “Are we teaching the right things?” Should we not better focus our teaching on the control of chemicals, dusts, manual handling, and noise - as a core competency for all health professionals?

Session VI  Actors in international OSH education

This session was held under the title “Actors in international OSH education or how to succeed in a better evaluation and in improving educational methods”. The LDOH foundation promoted searching in online available literature for reliable information on OSH, presenting the 3rd edition of a free downloadable e-book on this topic. In addition, LDOH released on the website of the foundation a new e-library for free online courses and lessons in OSH. The role of ENETOSH in mainstreaming OSH
to education was displayed with a current study including a quantitative analysis of 411 examples from the ENETOSH database aiming to systematically analyze and identify models of good practice and to determine future trends. The ENETOSH gave reference towards improving evaluation of education and displaying good educational practices.

Also, the role of EASOM in educating occupational health and current initiatives in training Occupational Physicians were presented. Next, education for primary and community healthcare on workers’ health as practiced in various countries was displayed. Finally, asynchronous online training of healthcare workers and hygiene/safety managers in occupational health and hygiene was presented. The Global Master of Science Program in Occupational Health lead by the University of Illinois USA is an online, interactive program in Health and Hygiene that has trained 135 individuals from 85 different countries over 8 years of existence.

**Special Session  OSH in Agriculture**

This part of the symposium gave the floor to important issues in health protection of a vulnerable working population employed in agriculture all over the globe, frequently suffering from disabling illnesses and injuries. Topics were the exchange of experiences in teaching methods and the development of a repository of relevant e-learning materials.

In Australia a blended learning training for health and agricultural professionals active in rural areas using a community based approach, was evaluated with positive sustainable results. From the
International Centre for Rural Health in Milano, Italy different educational activities are organized at national and international level. An EU Erasmus+ project in Central Asia and India was introduced focusing on occupational and environmental health in Masters and PhD programs.

Social marketing principles are applied successfully to influence behavioural change in the safe use of pesticides in a project in India. Experiences with courses in agricultural leadership and agricultural business management were shared from Sweden based on the point of departure that a safe and healthy workplace is essential for running a professional farm. An EU-COST project on Safety Culture and Risk Management in Agriculture (SACURIMA) was introduced having the aim to reduce the burden of work-related deaths, injuries and diseases in agriculture. A meeting of the SACURIMA consortium (active till 2021, chaired by Risto Rautiainen) was organized in connection with this ICOH symposium.

In the Netherlands the foundation LDOH developed an e-library offering easy access to free OSH e-learning materials with trusted origin and quality. LDOH stipulated the need and called for collaboration in reviewing, selecting and describing educational materials in OSH for agriculture to be disseminated through this e-library.

**Session VII  Effectiveness of Occupational Health Care**

Session VII: “Effectiveness in OH care and relations with other healthcare professionals” started with an overview of scientific study designs and the recommendation to perform more studies on the effectiveness of education and care, using good designs e.g. using – when possible – (randomized) control groups in a before-after study model. The essential role of well-educated primary health care professionals was stressed in several contributions, with the aim to reach more workers with basic occupational health care. WONCA (family physicians) and ICOH are supporting this development. Imaginable educational approaches were explored in Croatia asking opinions of family physicians, and tested in workshops for family physicians in the Netherlands. Workers’ health was recommended as being a part of a comprehensive or holistic approach in Montenegro, with the patient as subject of all actions. Educational programs on Occupational Medicine for medical students, nurses, OH specialists and family doctors were shown. This session provided the floor for nourishing the bridge of collaboration between Croatian specialists in occupational and sports medicine, and general practitioners.
Poster session

The symposium accommodated 20 posters, presented by a short speech. The prize for the best poster was for the poster “Occupational health surveillance and health education activities among farmers in south of Iran” presented by Ramin Tabibi from Iran.

Many posters presented education on vocational schools, such as a development study on how to promote safety culture in vocational schools (Croatia). A training for hairdressers’ start-ups is developed after studying approaches in several countries. In the target group are often low-skilled young girls with a migrant background, fed up with school. So, the learning has to be visual and based on real-life issues, with room for dialogue (Belgium).

Evaluating the training of workers in coping with health at work and focused on protecting outdoor workers, showed the additional need to educate the employers (Croatia). A similar conclusion was drawn analyzing seminars for workers on workplace stress management (Croatia). An active online learning platform on noise protection, directly in contact with workers, could be a new approach (Croatia). Collaboration between the Croatian institute and unions in organizing seminars on a range
of OSH subjects for union representatives was evaluated as most rewarding. A stress questionnaire for workers was tested on OM specialists. One conclusion was the necessity to know the work processes and the work organization well while interpreting the results of the questionnaire (Croatia). In a fresh-meat processing industry in Croatia seminars were organized on body postures during work and physical exercises to prevent musculoskeletal disorders. Evaluation of new legislation in Croatia on asbestos showed a lack of awareness regarding asbestos risks. Health surveillance and better education were recommended. A guideline on safe work on family farms was developed by the Croatian institute; lectures were given for experts and for students in secondary vocational schools for agriculture. After an educational program for medical students the attitude about occupational medicine as a specialty changed in a positive direction (Romania).

Experiences with education of primary health care (PHC) to stimulate basic occupational health care were presented from Indonesia, Iran, USA/Ghana and the Netherlands. In USA training for PHC has been developed, commissioned by WHO, to address occupational health hazards in small-scale gold mining including diagnostic and preventive activities. A first course was evaluated in Ghana. An Indonesian study on cardiovascular risk levels in informal workers resulted in a community diagnosis: almost half of this population has a high risk of cardiovascular disease. Health promotion campaigns and enhancing skills in PHC are recommended. In Iran a survey is organized as a first step in developing health surveillance programs and education for farmers. Significant health risks were present. So called Workers’ Houses located in PHC, play a key-role in basic occupational health care in Iran. In a contribution from the Netherlands an elaborated plan was presented to develop a free-of-charge short course for PHC on OSH in agriculture.

Good feasibility was shown of a new quality assurance system to monitor the education of occupational physicians in the Netherlands. In Indonesia is discussed how to improve the specialization in Occupational Medicine adding academic competences from a Master program. From Ukraine efforts were shown on how occupational medicine specialty education is recovering after a long period of severe problems. The University of Milan and the International Centre for Rural Health developed a new professional profile for ‘Technicians for the prevention in living and working environments’ (Bachelor/Master). A specific program for agriculture has been developed.
Considerations on topics that deserve special attention

Presentations were given by participants from many countries, representing a large variety of experience in education of workers, managers, students, OSH experts and family physicians. The scientific committee is joining many committed educators and scientists active in developing and evaluating educational efforts. So, both practice and science were present at the symposium increasing the quality and relevance.

At the end of the meeting we considered that the attention can be drawn to a number of topics that may deserve special attention.

A tool for change: education of workers, managers, and students in vocational schools

Information and education of workers, managers and students in vocational schools, as potential effective tools for change are often undervalued. For improvement bridges are needed between the three often separated worlds of health care, labor and education. In those cases when technical solutions to solve serious risks for health and safety are absent or far too expensive, information and education are essential to enable workers and managers in taking their duty to control the hazards by adequate coping behavior and by using protective equipment, supported by a company culture endorsing health and safety. All students in vocational training have to be prepared adequately for safe and healthy work practices in their future jobs.

Disciplines in OSH, occupational health nurses, more attention for interdisciplinary collaboration

The contribution from South Africa clarified the key role occupational health nurses can play. To fulfil the tasks, a good specialist training as occupational health nurse is needed together with adequate continuous medical education. Good training is essential for all OSH professionals including occupational physicians, hygienists, nurses, ergonomists, psychologists and prevention specialists, as was shown in presentations in this symposium. One important theme is stimulating cordial and
effective interdisciplinary collaboration dedicated to the common final goal of supporting workers and enterprises in occupational safety and health. Collaboration with experts and other committed persons and organizations outside the OHS-professionals can be most fruitful as demonstrated in the agricultural setting in which agronomists can play a key role in education in OHS issues, in changing the safety culture and in the introduction of improved working methods.

**Basic occupational health care, primary/community health care, agriculture, medical students**

Forms of basic occupational health care are needed with urgency, among others to meet the huge needs of informal workers and of the agricultural sector. Therefore, education of primary and community health care professionals and volunteers is needed related to so called workers’ health and safety. Contributions from India, Iran and Indonesia showed the needs and pioneering solutions that deserve all support from the global community of OSH experts and from leading international organisations. Education and training in primary health care plays a vital role in the innovation needed in all countries. Examples were presented from Turkey, Croatia, Brazil, South-Africa, the Netherlands and USA. OSH education in agriculture is one of the priorities. Education of medical students should include Occupational Medicine to guarantee that all physicians have got the chance and experienced the duty to learn basic facts and skills needed when confronted with work-related health issues in daily practice.

**Needs at the workplaces, a base for education development**

Learning objectives in education have to be developed in accordance with locally prevailing hazards, risks, accidents, diseases and cases of preventable exclusion from work caused by a disease or an injury. The special session on OSH in agriculture and the price-winning poster showed the needs and the necessity to organize and finance education and training for professionals and workers in this sector. High risks may be present as well in other sectors and occupations like they are in the health care sector, education, transport, construction and industry. Burden of disease studies can draw the
attention to specific occupational risk factors in a country or in a sector of industry such as to (specific) dust, carcinogens, safety risks, noise and ergonomic risks at the workplace. Studies on exposures or on specific work-related and occupational diseases may show high incidence rates of work-related mental health disorders and e.g. work-related skin diseases.

At the same time we should not forget to give due attention in education to raising awareness about the many positive effects of work on health and well-being. Work offers an income, social relations, and in many cases satisfaction as work can fulfill the wish to be useful for the society and others, and to be able to develop one’s talents and creativity constantly.

**Educational forms need improvement**

Educational forms for OSH education have to be discussed and improved ‘every day’, and adapted to differences in target groups, while being adequate given the learning objectives. Far too often traditional face-to-face teaching is the norm despite the fact that more effective and attractive forms of teaching and learning are available. For e-learning and blended learning we need specific formats that we can discuss with the aim to improve these new forms of learning and teaching. For specific groups e.g. primary health care professionals, specific learning materials have to be developed and different educational approaches have to be created, evaluated and shared. More in depth we may explore together what exactly knowledge is, and how transfer of knowledge can be facilitated, and how online information can be used better in education in an age in which many watch their smartphones hours a day.

**Scientific evaluation of quality and effectiveness**

Evaluation in practice mostly is focused on asking participants about satisfaction with a lesson or course and about meeting of expectations and needs. A common evaluation method in scientific studies is a before-after comparison of knowledge, skills and attitude of participants. Assessing the self-efficacy and the intention to use in practice of what is learned can be added. When two or more
groups of individuals are used, the selection can be randomized or not. Measuring changes in behavior or in actual use of knowledge and skills in practice would be ideal but is not easy to achieve.

For workers additional final outcomes could be: reduced prevalence of hazards and risks at the workplace, better availability and more use of protective measures, improved coping behavior such as related to risks, less occupational and work-related diseases and less (near) accidents. We can add as outcomes for workers among others: increased participation in paid work especially for people with a work disability, better health related to the prevention of common non-communicable diseases, better team work and more well-being at the workplace.

Scientific studies evaluating education in OSH are scarce, and quality can be improved as has been demonstrated at this symposium. Universities, schools and national institutes have to be stimulated to perform more of good scientific studies. They can select one of many available study designs evaluating quality, effectiveness, feasibility, coverage and other topics. Not only face-to-face education has to be innovated and evaluated but also, because of the opportunities for a wide coverage, e-, m- and blended-learning programs. We need a good evaluation of educational and informative apps for smartphones and tablets, MOOCs (Massive Open Online Courses) and serious games. Network forming between participants of a course may be part of the evaluation.

A plan has been launched to write a concise guide or article on the evaluation of education, with recommendations for appropriate study designs. ‘No education without evaluation!’ could be a good slogan for the next meeting.

**National and international collaboration** between institutes, networks and international organizations should be put into practice, more than has been done so far, given the huge global lack of information and education for workers, managers, students, OSH and non-OSH professionals. Let us do our utmost best!

Actually WONCA, ICOH, ISSA, WHO and ILO are supporting the essential role of primary health care in the realization of Basic Occupational Health Care or Services (BOHS), focused on the urgent need to support all workers in the world, but – if we are honest - there is surely room for improvement.

Open Access to quality online learning materials and to scientific articles, reviews and evidence-based practice guidelines, deserves a higher priority on the international agenda. Open Access can give a boost to increased coverage and quality of education and information in OSH.
Annex

Oral and poster presentations at the

ICOH Symposium ‘Education in OSH, emerging trends and unmet needs’

Zagreb, Croatia, 26 -28 October 2017

Opening Ceremony and Opening Session I

Research needs and opportunities in education and training in occupational health. Frank van Dijk, Netherlands

ILO ITC, a new Master in OSH program. Davide Bosio, Italy

Education in occupational medicine in Croatia-known knowns and the unknowns- the present state. Jadranka Mustajbegovic, Croatia

Training in interdisciplinary team work. Marija Bubas, Croatia

Session II: Experiences in training health professionals: Current situation and unmet needs around the globe

Occupational health issues in European region for occupational physicians. Petar Bulat, Serbia

Occupational health issues in Japan, especially for occupational physicians. Shigeyuki Kajiki, Japan

Occupational health issues and new arising challenges in a growing economy. Zhijun Zhou, China

A program for education of primary health care for informal sector workers. Souvarna Moti, India

Short introduction on OSH education. Susan Brumby, Australia

Occupational health nursing education in Southern Africa. Penelope Orton, South Africa

Education and training programs in Latin America. Lena Kurtz, Germany

Training of occupational health professionals in USA. Eric Wood, USA
Session III: International collaboration in strengthening capacities in OSH training

Development and evaluation of a training programme on scientific research and occupational health surveillance in Turkey. Lutgart Braeckman, Belgium

International Master of Science program in Latin America, LMU Munich. Katja Radon/Lena Kurtz, Germany.

AGROSH+, training occupational medicine physicians and occupational health and safety experts involved in agricultural sector. Elena Ana Pauncu, Romania

Course on educational methods in occupational safety and health. Lena Kurtz, Germany

Interdisciplinary and experiential learning in occupational safety and health. Mitchel A. Rosen, USA

Session IV: Education of students and professionals- troubleshooting and how to do it

Educating occupational health in undergraduate setting. Nurka Pranjic, Bosnia Herzegovina

Occupational medicine in Macedonia- teaching new generations. Jovanka Karadzinska Bislimovska, Macedonia

Teaching undergraduate and postgraduate occupational medicine: sharing problems and ideas. Milan Milosevic, Croatia

Teaching health surveillance to OSH and non-OSH professionals. Gert van der Laan, Netherlands

Session V: Education of old and new target groups

Awareness, knowledge and practices regarding occupational hazards among medical students: A longitudinal study. Lutgart Braeckman, Belgium

Occupational health and safety training for naïve health workers in South Africa. Muzimkhulu Zungu, South Africa

OSH training and education in hospitals and healthcare institutions. Maria Titopoulou, Bulgaria

Development of new educational programs and challenges in implementation. Astrid Sulistomo, Indonesia

“Are we teaching the right things?” Consequences for Occupational Health Education and Primary Care from the Global Burden of Disease Study. Norbert Wagner, Singapore / Germany
Special Session on Agriculture

Education and training in agricultural health and safety

Blended learning courses in farmers’ health, lessons learnt. Susan Brumby, Australia

Safety culture and risk management in agriculture. Risto Rautianen, USA/Finland

Experiences from the International Centre for Rural Health. Claudio Colosio, Italy

Education in agricultural leadership – an alternative to traditional health and safety courses. Peter Lundqvist, Sweden

Social marketing- focus in occupational safety and health education. Sashikala Chandrasekar, India

Towards a repository of online OSH learning materials for agriculture. Gert van der Laan, Netherlands

Session VI: Actors in international OSH education

The foundation LDOH and how to look for reliable information on OSH. Frank van Dijk, Netherlands

The role of ENETOSH in mainstreaming OSH to education. Ulrike Bollmann, Germany

The role of EASOM in educating occupational health, current initiatives. Jasmina Godnic Cvar, Austria

Occupational health education for primary and community healthcare. Frank van Dijk, Netherlands

Asynchronous, online training of healthcare workers and hygiene/safety managers in OH and hygiene. Linda Forst, USA
Session VII. Effectiveness in OH care and relations with other healthcare professionals

Effectiveness in occupational health services. Stefano Mattioli, Italy

How primary health care can help reaching more workers with basic occupational health. Peter Buijs, Netherlands

Teaching residents and medical students about holistic approach to workers health. Ljiljana Kezunovic, Montenegro

OHS topics important to family physicians. Renata Ecimovic Nemarnik, Croatia

Education in OH for general practitioners: work related problems, what could GP do? Marjolein Bastiaanssen, Netherlands

Occupational medicine issues from the perspective of a family physician. Natasa Ban Toskic, KohOM Croatia

Poster session

Quality assurance system for education of social medicine physicians in the Netherlands: a new direction. Marjolein Bastiaanssen, Jacqueline Gerritsen, Tineke Woldberg, Ronald Duzijn, Cécile de Ruiter. The Netherlands

Creating a safety culture teaching and learning OSH in secondary vocational schools in Croatia. Ivana Krišto, Marija Batak, Sanela Dlugoš Paskaš. Croatia

Heat and outdoor workers, was our education successful? Karmen Bradvica, Zlatko Šarić, Marija Bubaš. Croatia

OSH education on family farms in Croatia. Sonja Damjanović Dešić, Zlatko Šarić. Croatia

Teaching physical exercises and healthy dietary habits to workers in fresh meat processing industry. Martina Elez, Marija Bubas. Croatia

Training primary health care workers on how to address occupational hazards associated with artisanal and small scale gold mining. Linda Forst, Gabriela Gracia, Michaela Pfeiffer. USA


The role of education in hearing conservation principles in Croatia. Ivana Marinac, Marija Bubaš, Tamara Radošević, Željka Sokolović Pavić. Croatia

At the workplace: the experience of the University of Milano and of the International Centre for Rural Health. Federica Masci, Claudio Colosio, De Luca P. Italy

Effectiveness of Croatian legislation regarding benefit entitlements in workers occupationally exposed to asbestos. Marina Milaković, Ina Kardoš. Croatia
Education of union representatives from independent trade unions of Croatia in the Croatian Institute for Health Protection and Safety at Work. Natalija Pejnovic, Cvetan Kovac. Croatia

Impact of worker’s place of residence and labor on prevalence of autosomal chromosomal anomalies in their children. Jure Pupić-Bakrač, Ana Pupić-Bakrač. Bosnia and Herzegovina; Croatia

Specialists in occupational health in Croatia and their exposure to the risks of work-related stress. Azra Huršidić Radulović. Croatia

The influence of occupational medicine program in medical students’ attitude towards this specialty. Armand Gabriel Rajnoveanu, Razvan Ionut, Maria Barsan, Andreea Iulia Socaciu, Marilena Oarga. Romania

Actual questions and problems of postgradual education in occupational health. Viktoria Rodionova, Sergey Sobko. Ukraine

The need of a skill in community diagnosis for the provider in the primary health care. Ambar Wahyuningsih Roestam, Magdalena Rusady Goey. Indonesia

Experience in education at the occupational medicine master- and specialist programme in Indonesia. Dewi Sumaryani Soemarko, Astrid B Sulistomo. Indonesia

Occupational health surveillance and health education activities among farmers in south of Iran. Ramin Tabibi, Shahram Tarahomi, Shokat Tajzadeh, Ali Asghar Valipour, Maryam Sokooti. Iran

Concise course on basic occupational health care in agriculture. Maarten Verberk, Frank van Dijk, Gert van der Laan, Mieke Lumens, Ad de Rooij. The Netherlands

A close shave, an European Social Fund project. Miet Verhamme. Belgium