# EASOM POSITION PAPER ON TEACHING OCCUPATIONAL MEDICINE

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Line I = common trunk which then separates into postgraduate OM

and other specialities

Line II = Postgraduate Level

Line III = health care professionals (non-spec. in OM, even non-

physicians)

Line IV = non-medical personnel (i.e. safety engineers)

#### LINE I: COMMON CURRICULUM IN OM FOR ALL MEDICAL STUDENTS

Most people spend a third of their adult life at work and occupation is an important determinant of human health. Occupational injuries and diseases as well as work-related diseases, those caused by or made worse by work, have profound effects on work productivity and on the economic and social well-being of workers, their families and dependents. It is estimated that roughly four percent of the annual global Gross Domestic Product (GDP) is lost through direct and indirect costs of work related accidents and diseases such as lost working time, workers' compensation, the interruption of production and medical expenses. However, work does not only adversely affect people's health but employment has also strong positive effects. It can provide a sense of purpose and self-worth, opportunities to meet people and to learn new skills; it offers financial security and social status. Work is good for us, as long as it is good work.

If all professionals, and not just health professionals, understand this two-ways relationship between health and work, there is a potential for more adequate prevention. Promoting work ability, avoiding occupational diseases and injuries affects positively workers' health. In addition, it results in benefits for single companies, national economies and society as a whole.

Medical doctors, whichever speciality they practice, have a key role in the prevention, diagnosis and treatment of work-related diseases, in the promotion and maintenance of good health and well-being, and on helping

their patients return to work after an illness. Unfortunately, their training in occupational medicine is usually limited.

Therefore, we believe that medical students should receive training on work and health issues.

Occupational health and safety (OHS) is a multifaceted and cross-disciplinary field concerned with preventing and recognizing of occupational diseases, managing safety, health and well-being of people at work. It involves interactions between different specializations, for example, occupational medicine, occupational (industrial) hygiene, safety engineering, toxicology, ergonomics, work and organizational psychology, and health promotion.

Since 1950, the International Labour Office (ILO) and the World Health Organization (WHO) have shared a common definition of occupational health. The definition, which is still valid today, refers to "the promotion and maintenance of the highest degree of physical, mental and social well-being of workers in all occupations".

**Occupational Medicine** (OM) is the branch of preventive and clinical medicine primarily active in the field of occupational health. Occupational Medicine contributes to workers' health considering work demands and individual capacities. It is also involved in the return to work of employees including those with disability or chronic diseases, even if they have not been caused by the work.

The principal role of **Occupational Health Services** and **occupational physicians** (OP) is the provision of health advice to employers, employees, and workers' council, aiming for high standards of health and safety at work and in the workplace. The ILO Convention concerning Occupational Health Services (C161) and the ILO Recommendations on Occupational Health Services (R171) list a number of functions Occupational Health Services have to carry out.

The primary aim of the **European Association of Schools in Occupational Medicine** (EASOM) is the development and continuous improvement in the teaching and learning of physicians in the field of occupational medicine, in particular at the postgraduate level.

One of the strategies of EASOM to achieve its aim is to support institutions and teachers who provide such education and training by providing them:

Teaching programs

Teaching materials

population?

- Education on OM topics
- Support for students and teacher exchange

#### It also aims to

- Promote the use of new technologies to facilitate innovative OM teaching methods
- · Represent the interests of OM in EU committees
- Counsel authoritative accreditation bodies

### <u>Undergraduate and general training of medical students</u>

The access to Occupational Health Services in Europe is not optimal everywhere and needs to be improved. As workers seek advice and treatment from general physicians (GP) at present, they should be enabled to consider the specific work related risk factors and pay attention to the mutual effects of work and health.

Recognizing an occupational origin of a disease can prevent its occurrence in other workers. Therefore, medical students should be trained in this respect and to think like this.

In addition, physicians should consider and contribute to medical aspects of the return to work and rehabilitation issues with their patients and other third parties such as health professionals, the employer, insurance company, and always using the proper measurements and language they would understand.

Every physician should ask the following key questions regarding work and health:

- 1. Effect of work on health: could the work of the client/employee/worker/patient be (part of) the cause or the aggravation of his/her complaint or disease?
- 2. Effect of health on work: could the complaint/disease of the client/employee/worker/patient have consequences for his/her activities and participation in work (Fitness for work)? Are there consequences for colleagues, customers and the general

- 3. Referral:
  - should the client/employee/worker/patient be referred to an occupational physician or another specialist (structure/legislation/roles)?
- 4. Prevention and Rehabilitation: what can be done to return the worker to their occupation and in a manner which is good for their health?

Recent research<sup>1</sup> revealed that the teaching of OM shows substantial differences across European countries.

Educational institutions increasingly put efforts in providing attractive and updated training at the undergraduate level.

During the last years, medical schools have developed separately or jointly their own OM teaching programmes. (Ref Katia Radon. EMUTOM and others)

EASOM, considers that every undergraduate medical student should be provided with a minimum of training in OM to be able to assess the questions listed above.

## Line II: Postgraduate level

The general requirements for the specialist title of OM are regulated by the European Directive: 93/16/EEC

http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=URISERV:l23021

Trainees need to follow a training programme of at least 4 years.

The decision of UEMS Section in Occupational Medicine and UEMS Council the Training Requirements for the specialty of occupational medicine were adopted:

In reference to these documents EASOM recommends that every OM candidate successfully passes at least 300 hours of theoretical training and additional 4 years of supervised OM practice.

EASOM puts forward the ideas on the minimum requirements of common competencies, the topics that have to be included, and also how to assess the trainees.

Core competencies for specialists in OM should reflect the needs concerning work and health

#### COMPETENCIES FOR THE OCCUPATIONAL PHYSICIAN

(UEMS Sect. Occ. Med, published on the UEMS Website Ref. 6-8)

- 1. Framework for practice
- 2. Clinical practice
- 3. Fitness for work, rehabilitation and disability assessment
- 4. Hazard recognition, evaluation and control of risk
- 5. Business continuity, disaster preparedness and emergency management
- 6. Service delivery and quality improvement
- 7. Leadership, policy development and professionalism
- 8. Epidemiology and preventive health
- 9. Research methods
- 10. Effective teaching and educational supervision

The occupational physician is thus competent to carry out the following functions:

- Early recognizing and detection of occupational and work-related diseases and injuries
- Identification and assessment of the risks from health hazards in the workplace;
- Surveillance of workers' health based on legal requirements, the magnitude of occupational risks to workers' health or by voluntary agreement;
- Surveillance of the factors in the working environment and working practices which may affect workers' health:
- Advising on occupational health, safety and hygiene, ergonomics and on individual and collective protective equipment;
- Organizing first aid and emergency treatment;
- Advising on the planning and organization of work including the design of workplaces, the choice, maintenance and condition of machinery and other equipment, and on substances used in work;
- Participating in and guiding the process of formulating health and safety policy based on sound ethical principles; Promoting the adaptation of work to the worker; assessing disability and fitness for work. Promoting work ability;
- Advising on fitness for work and adaptation of work to the worker in the special circumstances of vulnerable groups and specific legislation, for

- example the EU Directive on Protection of Pregnant and Lactating Mothers 92/85/EC;
- Collaborating in providing information, training and education in the field of occupational health, safety and ergonomics to management and the workforce;
- Contributing to scientific knowledge regarding hazards to health and safety at work, by research and investigation into health and work ability problems at work, following the ethical principles attached to research work and to medical research and including an evaluation by an independent committee on ethics, as appropriate;
- Advising on, supporting and monitoring the implementation of occupational health and safety legislation;
- Recognizing and advising on hazardous exposure in the general environment arising from industrial activities;
- Participation in workplace health promotion programs;
- Management of the occupational health services;
- Advise for improving working conditions
- Reintegration and return to work
- Working as part of a multidisciplinary service.

#### - UEMS Dokuments

- MacDonald E, Baranski B, Wilford J (eds). Occupational Medicine in Europe: Scope and Competencies . WHO European Centre for Environment and Health, Bilthoven, 2000, 84 p.; pp. 36-42 'Core competencies for specialist occupational physicians' and pp. 56-62 'Specialist training'

## Update of the following reference:

- Macdonald EB, Ritchie KA, Murray KJ, Gilmour WH. Requirements for occupational medicine training in Europe: a Delphi study Occup Environ Med. 2000 Feb;57(2):98-105.
- Reetoo KN, Harrington JM, Macdonald EB. Required competencies of occupational physicians: a Delphi survey of UK customers. Occup Environ Med.2005Jun;62(6):406-13.
- Gallagher F, Pilkington A, Wynn P, Johnson R, Moore J, Agius R. Specialist competencies in occupational medicine: appraisal of the peer-reviewed literature. Occup Med (Lond). 2007 Aug;57(5):342-8.

#### **Assessment:**

Every country should organize an assessment of their trainees' competencies. This would be under the authority of the National Bodies.

Several possible examination forms are recommended but the final choice is left to each country.

An assessment comprises of theoretical knowledge and practical skills.

## LINE III: HEALTH CARE PROFESSIONALS (GPs, NON-SPECIALISTS IN OM, NON-PHYSICIANS)

Since work and health are so closely linked, all health professionals should receive some training in work and health issues.

Studies have shown that the training of **general physicians** in occupational medicine is rather limited <sup>1,3,4</sup>. Aspects of prevention, hazard identification and (occupational) risk assessment in the workplace, are underestimated as are such obvious questions from client/employee/worker/patients such as the likely return to work after an illness (myocardial infarction) or an operation (laparoscopic versus open surgery of the knee). Therefore it is necessary to establish training programmes in OM not only for medical students, but also for physicians who have graduated in the past.

We recommend the implementation of OM issues in the continuous professional development (CPD) of all health professionals. They should contain workplace relevant aspects of prevention as well as workability, return to work issues and the basic legal aspects.

Furthermore, the increase and change of knowledge not only in OM needs close collaboration between specialists in OM and other professionals,

There are some non-medical professions who are needed in the field of occupational health. Several tasks can be delegated to those professions, when they have completed a special training in occupational medical aspects. A respective curriculum should be established.

## LINE IV: OTHER NON-MEDICAL PERSONNEL E.G. HYGIENISTS, ENGINEERS

For a better interdisciplinary communication it is necessary that all relevant professions in the field of OSH have a common basic/core knowledge (5). EASOM states that these professions should be trained in the basic principles

of OM/OH so they understand fully their roles and responsibilities as well as their limitations.

### References

- Gehanno JF, Bulat P, Martinez-Jarreta B, Pauncu EA, Popescu F, Smits PB,Van Dijk FJ, Braeckman L. Undergraduate teaching of occupational medicinein European schools of medicine. International Archives of Occupational and Environmental Health. 2014;87:397-401.
- 2. Braeckman L, De Clercq B, Janssens H, Gehanno JF, Bulat P, Pauncu EA, Smits P, Van Dijk F, Vanderlinde R, Valcke M. Development and evaluation of a new occupational medicine teaching module to advance self-efficacy and knowledge among medical students. Journal of Occupational and Environmental Medicine, 2013, Nov;55(11):1276-1280.
- 3. Buijs, P., Gunnyeon, B., & van Weel, C. (2012). Primary health care: what role for occupational health? The British Journal of General Practice, 62 (605), 623–624. <a href="http://doi.org/10.3399/bjgp12X659141">http://doi.org/10.3399/bjgp12X659141</a>
- 4. Buijs P, Frankvan Dijk
- 5. www.ohlearning.com
- 6. <a href="https://www.uems.eu/\_\_data/assets/pdf\_file/0018/19422/UEMS-2013.19-SECTIONS-AND-BOARDS-Occupational-Medicine-European-Training-Requirements-2013.04.18.pdf">https://www.uems.eu/\_\_data/assets/pdf\_file/0018/19422/UEMS-2013.19-SECTIONS-AND-BOARDS-Occupational-Medicine-European-Training-Requirements-2013.04.18.pdf</a>
- 7. <a href="https://www.uems.eu/\_\_data/assets/pdf\_file/0016/19420/UEMS-2013.19-SECTIONS-AND-BOARDS-Annex-1-Occupational-Medicine-European-Training-Requirements-2013.04.18.pdf">https://www.uems.eu/\_\_data/assets/pdf\_file/0016/19420/UEMS-2013.19-SECTIONS-AND-BOARDS-Annex-1-Occupational-Medicine-European-Training-Requirements-2013.04.18.pdf</a>
- 8. <a href="https://www.uems.eu/\_\_data/assets/pdf\_file/0017/19421/UEMS-2013.19-SECTIONS-AND-BOARDS-Annex-2-Occupational-Medicine-European-Training-Requirements-2013.04.18.pdf">https://www.uems.eu/\_\_data/assets/pdf\_file/0017/19421/UEMS-2013.19-SECTIONS-AND-BOARDS-Annex-2-Occupational-Medicine-European-Training-Requirements-2013.04.18.pdf</a>
- 9. <a href="www.who.int/entity/ipcs/features/workers\_health.pdf">www.who.int/entity/ipcs/features/workers\_health.pdf</a>