HEALTH PROMOTION AND DISEASE PREVENTION A Handbook for Teachers, Researchers, Health Professionals and Decision Makers	
Title	Case Study of Analysis and Targets Setting in Workplace Health Promotion: Pilot Implementation of Health Environment and Safety Management in Enterprises (HESME) Program in the Republic of Macedonia
Module: 2.5.1	ECTS: 0.25
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Key words	Analysis, targets, pilot implementation, safety management, enterprises
Learning objectives	At the end of this course students should get information about workplace health promotion activities in the Republic of Macedonia and should be able to understand and compare practical concepts, principles and approaches.

Abstract	HESME program concept is based on building and strengthening existing national structures and practices for health promotion at workplace, occupational health and safety, and environmental health. As part of the global HESME program, which includes different activities in the Republic of Macedonia, HESME pilot projects in two enterprises in 2003/2004 were aimed at analysis and setting targets of workplace health promotion. The analysis was made by the Institute of Occupational Health, WHO Collaborating Center and conclusions and recommendations to all stakeholders were presented. Workplace health promotion needs and priorities were defined: control of work environment hazards, smoking and alcohol consuming, encouragement of sport activities. Dealing with health problems (specific indications on stress, muscle pains, injuries at work, respiratory and allergy problems) and addiction problems (alcohol consuming, smoking), application of self-protection measures, education of managerial team on workplace hazards and ergonomics. HESME pilot implementation in both enterprises is centered on encouraging the integration of workplace health promotion issues at enterprise level as preparation for further steps.
Teaching methods	Teaching methods will include: introduction lecture, interactive small group discussions on given tasks, followed by group written reports.
Specific recommendations for the teachers	This course will be organised within 0.25 ECTS credits out of which 2 hours will be done under supervision (lecture and exercise) and the rest is individual student's work. Teacher should advise students to use as much as possible electronic libraries to gather ideas and select examples of good practice in workplace health promotion.
Assessment of students	Written report produced by each group

CASE STUDY OF ANALYSIS AND TARGETS SETTING IN WORKPLACE HEALTH PROMOTION: PILOT IMPLEMENTATION OF HEALTH ENVIRONMENT AND SAFETY MANAGEMENT IN ENTERPRISES (HESME) PROGRAM IN THE REPUBLIC OF MACEDONIA

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HESME concept

Formulation of the concept and development of an international instrument on good practice in health, environment and safety management in enterprises (HESME) was made by the WHO, based on the WHO's Global Strategy on Occupational Health for All (1996), which initiated innovative approaches and active participation of the enterprises and other workplaces. At the WHO's Third Ministerial Conference on Environment and Health (London, 1999) ministries of health and environment from 51 countries made a commitment to develop HESME as a new approach for strengthening public health action in Europe with involvement of public authorities in promotion of holistic concept for good practice in health at workplace. At the First meeting of HESME with representatives of the ministries of health, environment and labor, representatives of ILO, UNEP and other international organizations held in Bilthoven, The Netherlands, in 2000, the development of common criteria and indicators on good practice of HESME was found to be the first priority.

HESME program concept is based on building and strengthening existing national structures and practices for health promotion at workplace, occupational health and safety, and environmental health (1,2,3,4). It promotes development of modern views of workplace health policy, collaboration, coordination of different sectors in the country, based on the idea that efforts of different stakeholders with comprehensive multidisciplinary approach can be combined to reach a common goal (5).

The Republic of Macedonia plays a pioneering role and is the first country in the region that practically developed and implemented HESME program. Activities were planned, coordinated and evaluated by the Institute of Occupational Health, a WHO Collaborating Centre, Skopje and a National HESME coordination center in the Republic of Macedonia. Macedonian Ministry of Health and WHO Regional Office for Europe have also played a crucial role in development of HES strategy, activation and integration of own national resources.

HESME pilot implementation

As part of the global HESME program, which includes different activities in the Republic of Macedonia, HESME pilot projects in two enterprises in 2003/2004 were aimed at analysis and targets setting of workplace health promotion. HESME methodology was applied and this included:

- Interdisciplinary approach in which managing team, safety at work service, occupational health service and Institute of Occupational Health were the main stakeholders;
- Developing cooperation and commitment by all stakeholders;
- Application of the European working conditions survey questionnaire (created by European foundation for improvement of living and working conditions-EFILWC)

with an interview protocol. This enabled establishment of indicator system for survey of physical and organizational environment, time, social outcomes and demographics. The questionnaire was modified with addition of lifestyle determinants.

Makstil, Skopje, Steel production enterprise

Pilot implementation started in 2003/2004 in Makstil, Skopje a medium sized, private steel production enterprise with step by step activities. As a fist step full support to the implementation and dedication to active participation was given by the managing team, services for safety at work and occupational health specialists. The employees (119 company workers) were adequately informed for the policies and aims of this program and they accepted to be active participants. Implementation activities were guided and coordinated by the Institute of Occupational Health. Questionnaire data analysis showed that employees, from different workplaces, most of them from Macedonian ethnic origin, had average working experience in the company of 24,47 SD 9,45 years with dominantly collective work in 5-9 people units. Physical environment vibrations, noise, gases vapors, dust, uncomfortable microclimate were detected to be main work environmental hazards. Average working hours of 44,2 SD 4,2 per week, night shifts, working on Sundays and Saturdays and often work over 10 hours a day appeared to be a problem. The employee's perception of social environment and interpersonal relations was dominantly positive with no mental, physical violence or discrimination on any basis. Employees reported that work in the enterprise had affected their health mostly in onset of stress, hearing problems, problems with eyes, muscle pains, and injuries at work. More than 53% of the examinees were not at all satisfied with their working conditions. High rate of smoking (in 40, 3%) and alcohol consuming (in 17, 6%) as lifestyle data were detected.

After the analysis made by the Institute of Occupational Health, conclusions and recommendations to all stakeholders were presented. Elements distinguished to be further on encouraged were: excellent knowledge of employees about the work environmental hazards, full implementation of self protection measures, good interpersonal relations, flexibility of work process and management, paid training to improve work capacity, organized canteen for meals during work. Certain elements of work conditions survey were pointed out as workplace health promotion needs and priorities in future: control of work environmental hazards, coping with health problems (stress, muscle pains, injuries at work), smoking and alcohol consuming, encouragement of sport activities.

"Dimko Mitrev" Veles, leather processing enterprise

HESME pilot project was also applied on 75 employees in a medium sized leather processing enterprise "Dimko Mitrev", Veles using the same methodology (awareness rising, creating interest and partnership, cooperation and collaboration of different stakeholders and multidisciplinarity as well as application of indicator system). The evaluation process revealed the main environmental problems, such as: inadequate control of workplace hazards, vapors, gasses, dust, chemical substances (reported by 97,33% of employees) and microclimate conditions (reported by 37,3% of employees). The ergonomic problems like repetitive movements (92%), exhaustive static work (82,67%), manual lifting of heavy objects (41,33%) and working at very high speed (98,6%) were dominant. Health problems mostly referred to respiratory system (57, 33%) and allergy problems (40%). Lack of application of self-protection measures (54, 67%), lack of paid training (not available at all

in the last 12 months) with very little access to telephone or making private calls (only in 17,33%) were pointed out as problems. Smoking (52%), alcohol consuming (in more than 35%), very little sport activities (in 13,33%) needed further attention. Half of the employees (50, 67%) were not satisfied with working conditions. On the other hand, more than 80% of employees were very well informed about the work place health hazards. Physical, mental violence, discrimination on any basis were not registered at all and positive social working and good interpersonal relationships were detected (97, 33%). The analysis created basis for setting health promotion targets and priorities, which included: control of work environmental hazards, dealing with health problems (specific indications on respiratory and allergy problems) and addiction problems (alcohol consuming, smoking), encouragement of sport activities, application of self-protection measures, education of managerial team on workplace hazards and ergonomics.

HESME pilot implementation in both enterprises has been centered on encouraging the integration of workplace health promotion issues at enterprise level. Taking into account that workplace health promotion activities are at the starting point in the Republic of Macedonia, the established comprehensive multidisciplinary dialogue and building partnerships need to be broadened and further developed.

Exercise

After introductory lecture, students work in small groups and are asked to discuss on these topics:

- Make proposal for further steps of workplace health promotion in Macedonian example. Make selection of priorities. Suggest improvement, take into account possible obstacles;
- Give an example from your own country and compare it with Macedonian experience.

Each group will produce a written report on the tasks. Timing: 2 hours.

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Recommended readings:

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- European Foundation for the Improvement of Living and Working Conditions, Indicators of working conditions in the European Union. Luxembourg: Office for Official Publications of the European Union, 1997. (ISBN 92-828-1887-X).

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- 4. Baranski B: Policy requirements and performance indicators for good practice in workplace health: Public health perspectives IJOMEH, 2002; 15(2):121-32.
- 5. Baranski B. Improving Health, Environment and Safety Management in Enterprises (HESME). Dortmund: European Network for Workplace Health Promotion, Federal Institute for Occupational Safety and Health, 2001; 8:7-8.