OCCUPATIONAL HEALTH AND SAFETY TRAINING – A SNAPSHOT OF EMPLOYEES’ LEVEL OF KNOWLEDGE

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ABSTRACT:

Introduction: The EU strategy “Europe 2020” sets up the instruments and targets for better educational levels and training as social dialogue, awareness-levels raising, law enforcement in the field of EU and national legislation. There are efficient resource interactions with other policy areas such as public health and education. EU funds, such as the European Social Fund (ESF) and the European Program for Employment and Social Innovation (EaSI), will support the application of rules relating to health and safety at work.

Purpose of this study is analysis and evaluation of the employees, knowledge about health and safety at the workplace and how effective were the conducted OHS training.

Tasks: Defining the level of awareness of workers for possibilities of health damage at work. Measuring the level of OSH training support for the implementation of preventive approaches to health protection in the workflow. Studying the preliminary psychological attitude towards OHS training both for employers and employees.

Method: Survey through a questionnaire held among workers and employees in several branches of the private sector.

Results: The study provides summarized information on several subjects: workers’ knowledge about dangerous hazards in their own working environment; adherence of the safety at work rules; proper use of personal protective equipment and specific work protective equipment; types of training, outreach and education the employees have undergone; levels of basic knowledge of the law and regulations related to OHS; most common methods of OHS training and education and their interpretation for safety and health at work.

Conclusions: Most workers are well aware of the health risks at their workplaces. All of them have passed at least one educational course related to OHS. More than 2/3 of the respondents have participated in several types of training. Workers have a basic knowledge of Bulgarian employment law, but it’s incomplete and can be extended to a better degree. The most common reason for participating in Health and Safety at work training is obligatory both by law or higher management of the company. There is a high need to supplement the OHS legislation.

Keywords: OHS training employees knowledge level; Health & Safety courses,

INTRODUCTION:

The strategic framework of the document “Europe 2020” determines some instruments to be implemented in the field of training and education, such as social dialogue, raising awareness, enforcement in the field of EU and national legislation. [1] Attention is paid to the useful interaction of education with other policy areas such as public health. The EU Funds – the European Social Fund (ESF) and the European Programme for Employment and Social Innovation (EaSI) are also of significance. ESF is supporting vocational training institutions so that workers and job-seekers have the opportunity of lifelong-learning, keeping up their skills and qualifications with the evolving needs of the industry and economy. [2] The European Programme for Employment and Social Innovation (EaSI) builds platforms and undertakes new skill acquisition initiatives, funding workers who need training, and also organizes short retraining courses. [3] The European Policy is targeted at supporting working people in education and health-related aspects by paying particular attention to the application of the requirements on safe and healthy work conditions.

In order to put these objectives into practice, the workers at different levels need to acquire the necessary knowledge and skills. Throughout their career, workers go through various courses, practices, training and education associated with occupational safety and health. These training are the subject of the present research.

The objective of this research is to make analysis and assessment of workers’ knowledge with regard to health and safety in the work environment and how effective their training is.

Tasks:

Identification of workers level of awareness regarding the probabilities of health impairment at work. To what extent do training on Safe and Healthy Work Conditions support the application of preventive approaches for health protection in work processes? Studying the preliminary psychological mindset with regard to OHS training on behalf of employers and workers.

METHOD:

Survey.

The survey was conducted among people working in different economic sectors – trade, restaurant services, and production. The respondents were from the cities of Sofia, Varna, Burgas, Plovdiv. Ninety workers, employees and medium-level managers were interviewed. The number of men and women was approximately equal. The relative share of respondents with secondary and higher education was also equal, and none of them marked options such as “education below secondary” or “without education”. Half of the respondents have a work experience of above 10 years, about one-third of them – between 3 and 10 years, 20% have a work experience of fewer than 3 years. The questions were grouped in two directions – Socio-medical and employment medical details, as well as psychological and health-related data.

RESULTS:

Socio-medical and employment medical details

All respondents who took part in the survey have attended at least one type of training associated with health and safety at work. More than half of them have gone through several different types of training in the course of their work experience.

When comparing risk assessment data for the respective business activity with the answers of the respondents in the survey, it is notable that the workers are aware of the specific risks for their work position and identify them extensively.

Based on their subjective judgement, almost all of the working people have built healthy work patterns. In single cases, people admit that they have not built such patterns or habits.

When asked the question as to which methods have been used in the training so far, 76% of the respondents mark „briefing“. The second place is for the practical instructions/guidelines for healthy implementation of professional obligations, with almost equal values for the lectures – the third method in terms of frequency.

The teaching level is understandable and tailored to trainees' abilities. 75% of the people consider that training are adapted to the specifics of their work. A bit more than 1/3 of the respondents had encountered situations that convinced them of the usefulness of those training.

According to 70% of the working people, the training courses are primarily a responsibility of employers. They are organized by them and conducted by specialists of Occupational Medicine Services (OMS)

According to the survey, 98% of the respondents believe they know what an “accident at work” is. They can unmistakably recognize “classical” accidents at work that happened at the workplace during working hours. However, one-fourth of the respondents provide a wrong answer about the accident at work occurring on the way to the workplace. They do not recognize it as such.

Only half of the people interviewed know that a Working Conditions Committee/Group exists in their company. (WCC / WCG).

People get information on the Covid-19 virus mostly from the television. One-third of them search for details on the Internet – official sites and social networks. Nearly half of the interviewed respondents indicate that they have obtained information from the respective manager who usually conducts briefings.

Psychological and health-related data

The phrase “Health Promotion” is familiar to only about 10% of the respondents. About 70% are clueless about its meaning. Approximately 20% have an intuitive idea but are not quite sure of it.

More than half of the workers and employees share the fact that they overwork themselves at work. The majority claim that there have been moments when they experienced pain in different parts of the body, which they associate with the working processes.

Only 72% of the working people take advantage of the preventive medical examinations organized by employers.

Work-related sense of anxiety appears to be an issue for less than half of the respondents. In most cases, it appears situationally.

A great part of the people interviewed considers that work experience in production has a greater weight compared to training. 40% feel confident that they can work safely even with no training.

According to 75% of people OHS training are of major importance for the health, but 11% are the working people who rely on themselves to gain experience on how to work safely.

Eighty percents require their employees to comply with OSH rules, being aware of their responsibilities. 17% admit that they improve the work of their employees only “when necessary”.

Barely one fourth of the respondents additionally educate themselves in connection with the profession. 40% believe that their work does not require improvement of qualification or upskilling. About 60% believe that the only reason for organizing and conducting various types of training is the statutory compulsion.

DISCUSSION:

1. Types of OHS training

In the surveyed companies, we observe a positive mindset on behalf of the management with regard to health protection at work and the active measures targeted at personnel training. The greatest number of training associated with urgent, life-threatening situations such as activities during disasters, accidents and catastrophes, as well as first aid courses, has been conducted in the work environment. The use of personal protective equipment (PPE) and occupational clothing is essential for the protection against injury, and therefore demonstrations of their correct use have been conducted everywhere. We even have information about employees who usually don't have to use PPE, and yet they attended such training. The workers in production have undergone courses on safe working with machinery and equipment on man-

datory terms. Some of the respondents have also been involved in training for managerial staff and health and safety officials. They have been introduced to the factors

harmful to health at the workplace and main regulatory documents in this filed. (Figure 1)

Fig. 1. Passed training courses

2. Main risks (hazards) in the workplace

We can make the inference that the workers have been made familiar with the risks in the workplace during the briefings on the implementation of each specific type of activity. [4] The most common risk for most of the professions is the tiring work posture - standing, sitting, bending, etc. In their answers to open questions, workers often mention the risk of mechanical injuries on slipping, falling, traumas while working with machinery and equipment. The most common are exhaustion, back pain and other osteomuscular problems. Eye strain appears to be a serious problem for almost half of the respond-

ents. It is most frequently caused by working on a computer but also by performing other activities requiring eye strain. Excessive strain – physical or mental is indicated as a harmful factor in the working life of one-third of the respondents. A noisy work environment is part of the everyday life of about 27% of the people interviewed. And working with external parties mentioned by nearly 24% turns out to be a serious challenge under the current situation of pandemic distribution of COVID-19. Quite rare are the cases of poor relations with colleagues and excessive requirements on behalf of management. (Figure 2)

Fig. 2. Main hazards in the workplace

3. Methods used in OHS training

Briefing as a training method is used three times more often than the other two methods – practical guidance and lectures. Employers, due to their moral responsibility or because of statutory compulsion, strive to strictly perform their obligations in this respect. (Figure 3)

Fig. 3. Training methods

The practical exercises and discussions with questions and answers are considered to be the most effective methods followed by the presentation method. The lecture type courses have the least supporters among the respondents in the survey. Irrespective of the method, the topics have been presented at an understandable level, and there haven't been cases of a subject that remained incomprehensible for the audience. The opinion of the workers is that greater attention should be paid to practical exercises and visual explanations, including films, presentations, and images. A small number of the people surveyed are also interested in the theoretical fundamentals of the knowledge presented.

The respondents share the opinion that the employer is to be engaged in the organization of the health protection activities, as well as in training. The occupational medicine service specialists are the competent ones who most frequently conduct the training. The health and safety body is also recognized as a competent figure involved in all activities on OHS, including the educational activities. Rarer are the cases when a worker, due to their personal interest, organizes a training course on their own or searches for the necessary information on the Internet.

4. Getting familiar with the key points of OHS legislation

Training programmes intended for the managerial staff, health and safety body, the members of the WCC [5], as well as the initial briefing for all the workers, contain information about the key points of employment legislation with which they have to be acquainted. The participants in the employment process should be familiar with notions such as "accident at work", "occupational disease" and "risks (hazards) in the workplace", and also need to be acquainted with the protection that the legislation provides

to them in connection with health protection. The survey reveals that the working people have gained knowledge but have not delved into details.

The Safe and Healthy Working Conditions Act [6] requires that a Working Conditions Group is set up in enterprises with more than 5 workers or a Working Conditions Committee for enterprises with more than 50 workers. As at present, these structures turn out to be rather unfamiliar to the workers. The survey covers workers and employees from companies with a staff composition that requires the functioning of a WCC on mandatory terms. However, only half of the respondents know that such a unit exists. The implementation of social dialogue in the company might prove to be difficult, as well as the solving of cases connected with the provision of a healthy work environment. The potential of WCC as a body supporting employer's decisions and as a mediator when requirements on behalf of the workers are being placed is still unused.

5. Employees' awareness of topical health-related issues

The current issue associated with the spread of Covid-19 requires quick reorganization of the work environment and a reaction on the part of employers and employees. Television and the Internet are the preferred source of information. Immediate superiors who conduct a briefing on site have also provided information as to what actions have to be undertaken in this specific working situation. This bears witness to the quick adaptation of the people conducting briefings and the actual implementation of their statutory obligations. At the same time, we take into account that still there are people who are not interested in the subject and believe that such a virus does not exist. (Figure 4)

Fig. 4. I get information about COVID-19 from

6. Health condition, subjective data on physical and mental strain

The term “health promotion” is unfamiliar to the workers. Regardless of that, it will be correct to make a conclusion that these people have not participated in activities associated with health promotion. The activities in this direction rather bear thematic names such as “the harm of smoking”, “adequate nutrition”, etc., when lecture and presentation courses are concerned or happen in the form of programs for overcoming sedentary lifestyle – purchase of gym or swimming subscription cards, organization of sports competitions.

The sense of fatigue and physical pain accompany the working process. In one-third of the respondents, it has led to diseases of the osteomuscular system connected with the work. Some people have complaints but are not sure whether they are due to their work. The greatest part of the respondents uses rest as a means of physical recovery. 15% believe that they need a medical consultation for treating their work-related disorders and complaints. The same percentage of people resort to intake of medicines, and sometimes to self-medication. Small is the share of people who recover through sport, movement or rehabilitation. (Figure 5)

Fig. 5. In case of pain I take following action

Workers have a positive attitude towards the preventive medical examinations organized by employers and are motivated to take advantage of them. In certain cases, they report that such examinations have not been organized at their workplace. The possible reason could be that these workers have been only recently appointed to work (i.e. the period determined under Ordinance 3/‘87 has not expired [7]).

The sense of anxiety originating from work has not affected a large number of the respondents. It appears in specific working situations and does not have a long-lasting effect and mental strain. Workers easily manage to get relieved from their work-related concerns when they get home. 90% of the people are confident that they know methods of dealing with stress.

7. Motivation for taking part in training

The importance of practical experience is undoubted. Some of the respondents in this survey even consider that they don’t need any additional training. Prob-

ably they rely on their own experience and sense for safety. A bit more than half of the interviewed claim that they have not made mistakes during work that could harm their health. The remainder report that they have suffered from such mistakes. The great part of the workers (40%) maintains the opinion that their work does not require upskilling or improvement of qualification. There are cases when workers are trying to perform certain activities more easily or more quickly and pretend to work in the appropriate manner in order to mislead the controlling staff. At the same time, more than half of the respondents share the view that OHS training have to be mandatory. 75% of the respondents think that OHS training are of critical significance for health. At the second place in number are the workers who depend on themselves to gain experience as to how to work safely in their workplace. There are also people who consider training to be a secondary task of employers, and single cases even deem it as a waste of time.

More than two-thirds of the respondents in the sur-

vey have an active attitude and positive mindset towards the health protection of their colleagues and subordinates. It is possible that the attendance in OHS training could happen under the pressure of the management. However, in the present survey, 57% of the workers express their voluntary participation. Alongside, they are not sure of how much the management is aware of the need for permanent care for their health. About 60% in total of the respondents consider that the reason for the activities on health protection is the statutory compulsion.

CONCLUSIONS:

A great part of the workers is well acquainted with the health hazards in their workplaces. They can define them extensively. They are aware of the negative consequences that the hazards at work might cause. Unfortunately, part of the workers suffers from disorders in their health condition, namely due to these factors.

The workers have an idea of the key notions under the employment legislation, but their knowledge is limited and incomplete. This is an obstacle to their opportunities to claim their rights with regard to health and safety at work, as well as to gain support in case of need.

All of the workers have undergone at least one training related to OHS. More than 2/3 of the respondents have attended different types of training. They consider them important and useful. Some of the workers also show interest in additional subjects associated with OHS and health promotion.

In the estimation of the respondents, the most common reason for the organization and participation in similar training is the compulsion of the law. Regardless of the cause, the workers have obtained the necessary knowledge. This fact substantiates the need of complementing the regulatory framework in this respect. The introduction of interesting, understandable and productive teaching methods could also increase positive motivation in OHS training and contribute to health protection.

Abbreviations:

OHS - Occupational Health & Safety

OMS - Occupational Medicine Services

WCC / WCG - Working Conditions Committee/
Working Conditions Group

PPE - Personal protective equipment

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