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Step-By-Step Procedure and Tools to Reduce Work-Related Stress

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Abstract

Based on available guidelines, protocol, etc., of the EU countries as well as evaluated results of the taken measures, step-by-step procedures are proposed as well as the tools of occupational medicine specialist for the identification of stressors and measures that should be taken to reduce stress at work. European Pact for Mental Health and Well-Being has focused its commitment on workplaces and a necessity to promote work settings, to create the atmosphere for mental health promotion emphasizing reconciliation between work and family life, to introduce a program for stress prevention at work and health promotion in the workplace and to support employment, rehabilitation and return to work of the workers with mental health issues and disorders. Any risk assessment at work, especially of psychosocial risks, requires support of employers and active participation of workers. For that reason, “fight against stress” should become a company’s policy. A number of procedures that follow are presented by diagrams that lead through methods of analysis and identification, from selection of measures for stressor reduction to the final evaluation. It is a cycle that ends by defining the term for a new analysis and assessment of psychosocial risks followed by the beginning of another cycle.

Keywords: step-by-step procedure, work-related stress, mental health, risk assessment, workplace prevention, occupational medicine specialist

1. Concepts

According to International Labour Organization [1] and European Commission’s Guidance on work-related stress [2], psychosocial hazards are interaction among job content, work organization and management, other environmental and organizational conditions, and the
employees competencies and needs. **Psychosocial risk** likelihood that psychosocial factors have a hazardous influence on employees’ health through their perceptions and experience and the severity of ill health that can be caused by exposure to them. **Work-related stress** pattern of emotional, cognitive, behavioural and physiological reactions to adverse and noxious aspects of work content, work organization, work environment and poor communication. **Burnout** is a state of physical, emotional and mental exhaustion that results from long-term involvement in work situation that is emotionally demanding [3].

**Stress is not a disease**, but it is the first sign of a problem; if the body experiences a continuous strain, stress can cause acute and chronic changes which can provoke long-term damage to systems and organs, particularly if the body cannot rest and recover. People exposed to stressors have physiological responses. Levels of adrenalin and cortisol hormones consistently rise in response to stress. Those stress hormones effect on blood pressure and cholesterol levels [4]. If chronically repeated, elevation adrenaline and cortisol are likely to have long-term consequences for health.

In the longer period, stress can contribute to hypertension and, as a consequence, to the development of heart and cardiovascular diseases, musculoskeletal disorders, metabolic syndrome and diabetes, as well as peptic ulcers, inflammatory bowel diseases. It can also alter immune functions, which may in turn facilitate the development of cancer. Other than these physiological and physical effects, stress has psychological and social effects. Stress impacts on both affective and cognitive outcomes such as memory loss, attention, decision-making, distress, anxiety, depression, burnout. Exposure to psychosocial risks has been linked to an wide array of unhealthy behaviours like excessive smoking and drinking, physical inactivity, irregular sleep and diet. These disorders are responsible for the great majority of diseases, disability and medical care use, death in most countries.

The society suffers from a loss of work capacity in individual due to direct financial health care costs and decreased quality of life. Work-related stress is determined by psychosocial hazards found in: work organization, work design, working conditions and labour relations.

### 2. Psychosocial risks factors

Workplaces are constantly evolving following changes in economic and social conditions in society. These new situations pose new challenges. The European Agency for Safety and Health at Work (EU-OSHA)'s second European Survey of Enterprises on New and Emerging Risks (ESENER-2) 2014 provides interesting information on some of the changers. In context of societal change, ESENER-e findings reflect the continues growth of the service sector [5]. The most frequently identified risk factors are interaction with difficult customers, students or patients (58% of establishments in the EU-28), followed by strenuous or painful work posture (56%) and repetitive hand or arm movements (52%). Among 16 most often causes of risk at work in the survey, psychosocial risk was in first place but also positioned at no. 7, as a form of long and irregular working hours and at no. 11 as a form of poor communication,
unsafe work, lack of possibility to influence on work and discrimination against gender, age or nation.

European Social Partners brought Framework Agreement on Work-related Stress in Brussels 2004. “The agreement” provides an action-oriented framework [6]. This includes non-exhaustive examples of indicators, risk factors and measures that should guide action.

- Suggested indicators for the identification of stress-related problems are high absenteeism, high staff turnover, frequent interpersonal conflicts or complaints by workers.

- The agreement provides an optional list of risk factors or stressors to be analysed:

  - **Work organisation and processes** (working time arrangements, degree of autonomy, match between workers’ skills and job requirements, workload, etc.)
  - **Working conditions and environment** (exposure to abusive behaviour, noise, heat, dangerous substances, etc.)
  - **Communication** (uncertainty about what is expected at work, employment prospects, or forthcoming change such as restructuring or new technologies/processes, etc.) and
  - **Subjective factors** (emotional and social pressures, feeling unable to cope, perceived lack of support, etc.).

- Regarding concrete measures to take, the agreement leaves some flexibility: “preventing, eliminating or reducing problems of work-related stress can include various measures. These measures can be collective, individual or both. They can be introduced in the form of specific measures targeted at intensified stress factors or as part of an integrated stress policy encompassing both preventive and responsive measures”.

Nowadays, most EU countries adopted a list psychosocial hazard of six key areas of work design: **demands, control, support, relationships, role and change** [7].

Guidance on the management of psychosocial risks in the workplace PAS 1010:2011 was published in 2011 [8]. It elaborates in detail some of key issues:

- **Job content**–Lack of variety or short work cycles, fragmented or meaningless work, underuse of skills, high uncertainty, continuous exposure to people through work
- **Workload and work pace**–Work overload or underload, machine pacing, high levels of time pressure, continually subject to deadlines
- **Work schedule**–Shift working, night shifts, inflexible work schedules, unpredictable hours, long or unsociable hours
- **Control**–**Low participation** in decision-making, lack of control over workload, pacing, shift working
- **Environment and equipment**–Inadequate equipment availability, suitability or maintenance, poor environmental conditions such as lack of space, poor lighting, excessive noise
- Organizational culture–Poor communication, low levels of support for problem-solving and function personal development, lack of definition of, or agreement on, organizational objectives
- Interpersonal relationships–Social or physical isolation, poor relationships with superiors, interpersonal at work conflict, lack of social support, harassment, bullying, third-party violence
- Role in organization–Role ambiguity, role conflict, responsibility for people
- Career development–Career stagnation and uncertainty, under-promotion or over-promotion, poor pay, job insecurity, low social value to work
- Home-work interface–Conflicting demands of work and home, low support at home, problems relating to both partners being in the labour force (dual career).

A large number of data were obtained by employees’ stress self-assessment, according to which 60% of the participants regard responsibility due to their line of work as stressful; 52% participants consider stressful situation interruptions at work; for 46% of employees, stressful situations are short notice deadlines; for 45% of employees, repetitive movements are stress inducers; and for 40% of employees, new tasks are stressful, especially for older working population [9]. A number of questionnaires are offered for self-assessment of the increased stress results, that is, burnout syndrome. In the Netherlands, 22% of the cases of burnout syndrome were caused by a job organization (too few or too many tasks, unclear duties, etc.), while the interpersonal relations at work hold the second place (21%) [10].

In the Netherlands, specifically among most stressful jobs is work behind a counter followed by the job of a teacher [10].

3. Mental disorders, work and cost

With regard to mental disorders in working population, three big groups of patients can be recognized. The first group of employees is the ones who have work-related mental health problems, while the second one has similar problems that are not work-related. Workplace is of great importance to both groups because of their rehabilitation process. The third group includes the unemployed suffering from mental disorders for a longer period of time, but it is also important to integrate them in the working process [11].

“European Pact for Mental Health and Well-being of 2008” gives workplace a central role underlying the necessity for improvement in workplace setting by creating a good work environment to contribute to mental health well-being by including reconciliation of work and family life, introducing stress prevention program at work, promoting health at workplace and support to employment, rehabilitation and return to work of employees with mental problems and mental ill health [12]. Luxembourg Declaration points out the importance of workplace health promotion since a considerable number of population spend significant
amount of time at work. To an individual being employed is an indicator of a social status, life satisfaction and sense of purpose which contributes to a person’s health. There are algorithms for workplace health protection and promotion that can be used for employee’s [13]. Occupational medicine specialist as a physician who does preventive health check-ups [14] can discover acute problems and address them, demand intervention at an individual or group level and implementation of efficient measures of monitoring and checking up [15]. In the Benelux Union and France, occupational medicine specialist has legal duty to annually analyse psychosocial risks [16].

To which extent a good communication, promotion at work and praise, positive attitude to work and colleagues as well as the feeling of giving (in one word well-being) contribution to the organization business are important is illustrated by the fact that employees who do not have positive attitude towards work and colleagues spend 3.5 days longer on sick leave every year. It is particularly important to emphasize that only 56% employees consider their income to be main motive for work, and it is stimulation only when 26% above the average [17]. The results of the survey showed that only 20% people successfully solved the problem if deconcentrated by offensive remarks or disturbed in some other manner, while 80% solved the same task if positively stimulated and praised. Humour at work reduces stress and improves the feel-good factor closer connecting the working community. Bad relationship in the workplace caused depression in 30% individuals [10].

**“GreenPaper”** of European commission–improving the mental health of the population–towards a strategy on mental health for the European Union of 2005 claims that mental health costs the EU an estimated 3–4% of GDP, mainly through lost work productivity. Furthermore, up to 28% of employees in Europe report stress at work [18]. The fact that mental health and the mental health-related problems affect 38.2% of European population every year illustrates how serious public health problem it is [19].

The Fourth European Working Conditions survey (Eurofound, 2007) found that work-related stress alone affects more than 40 million individuals across the European Union, costing estimated ₦20 billion a year in lost time and health bills; it is the most commonly reported causes of occupational illness by workers [20].

Studies show profitability in investing funds in reduction stress risk at work. For each invested Euro in reduction, from 0.81 to 13.62 Euros are returned to the investor [21]. The research results from 2013 submitted to the US Congress emphasize that the return of the invested money in stress reduction is even higher in the second and the third years after the investment [22].

### 4. Step-by-step procedure

Chart gives a detailed review of the step by step representing a number of procedures conducted in a company in order to assess psychosocial risks and select measures for risk reduction in a workplace. Step by step was created on the basis of available directives,
algorithms of the procedure, experience in antistress procedure implementation in some developed countries and evaluation of the results of the measures taken, adjusted to tradition, resources and legal provisions, published in Croatian [23] and presented on Final Conference of the EU Joint Action on Mental Health and Well-being (JA MH-WB) [24]. Based on available guidelines, protocol, etc., of the EU countries as well as evaluated results of the taken measures step-by-step procedures are proposed as well as the tools of occupational medicine specialist for identification of stressors and measures that should be taken to reduce stress at work.

The most important is the implementation of risk-at-work assessment, selection of measures and their control, primarily by employer along with employees and the assistance of an expert/employee in charge of safety at work and occupational medicine doctors/specialists [7, 14, 15, 25, 26].

The developed world and Europe apply several strategies and models that are focused on organization’s analysis and its existing activities, mainly those with regard to prevention and safety at work, health conditions of employees, selection of the most suitable tools for identifying psychosocial risks and stressors. One of the best known for all types of workplace risk assessment is SOBANE strategy which includes four levels: screening, observation, analysis and expertise level (S—screening, OB—observation, AN—analysis and E—expertise) [27]. With regard to the stress level according to Karasek’s model (demand/control), organizations are divided into four types: active (high job demands and high control), passive (low job demands/low control), high strain (high demands/low control) and organizations with little strain (low demands/high control) [28].

Each workplace risk assessment especially psychosocial risk assessment, requires employer’s support and employees’ active participation. Therefore, “fight against stress” should become organization’s policy (the first step—Figure 1). Along with the awareness of the necessity to fight against stress and employer’s support, it is necessary to motivate the employers and employees alone to participate in the workplace psychosocial risk assessment, as the primary goal is satisfaction of employees at their work. Healthy workplace environment and satisfaction at work have as a result a higher productivity and a better quality work. According to the latest indicators for organization’s management in fighting stress, the most important motive is complying with legal duties, meeting the employees’ and their representatives’ expectations avoiding the inspection fines but also maintaining the organization’s reputation and increase in its productivity [5].

The second step is establishing of a committee for stress reduction in the workplace, that is, a team to identify and analyse indicators, risks stressors, identify groups or individuals exposed to high risks, the so-called focus groups and select and propose measures for psychosocial risk reduction at work and at the same time, stressreduction. The committee carries out an action plan and makes decisions about measures to take, who takes measures, how the action is financed, who is responsible and the time needed for the action to be done. So, the owner and/or employer, that is, the authorized person is the key member of the committee for stress reduction in the workplace.
Figure 1. Step-by-step procedure and tools to reduce work-related stress.
Occupational medicine specialist is obliged to assess working environment and to work on risk prevention which is in accordance with the signed Convention 161 of International Labour Office (ILO) [29]. Employer is due to provide occupational medicine service and health monitoring corresponding with dangers, risks, health damages and strain at workplace with the aim of protecting employees’ health.

Furthermore, in some countries have legally established the Committee for Safety and Health Protection and its members including: employers or employer’s authorized person, representatives of employees, an expert for safety at work and an occupational medicine specialist [30]. Personnel administration employees and psychologists may be also included in the work of the committee.

Different methods of the problem analysis and identification (the third step) are applied in business analysis and work so-called stress indicators, not only of the organization but also of the occupational medicine specialist. Risk assessment of an organization is a legal obligation for employers and has a particular importance in getting the insight into safety and protection at work.

Along with the data obtained from an organization and obligatory risk assessment, data and occupational medicine specialist findings, there are a number of tests to enable a better insight into psychosocial risks in the workplace.

Employer alone can identify work stressors of his employees by means of work stressor questionnaire but there is a possibility for external assessor to do that.

A number of questionnaires are offered for self-assessment of the increased stress results, that is, burnout syndrome.

Employees who have already had disorders or problems should be sent to occupational medicine specialist who would, together with a psychologist as a member of occupational medicine team, take necessary measures, for example, direct the employee to the secondary and tertiary health services.

Analysis of all collected data done by the Committee members (the fourth step) can have many outcomes and the most favourable one is a low stress-risk, when no measures should be taken.

A group or individuals in which stress identifiers and analysis showed a high stress risk, the so-called focus group will probably require additional analysis and testing as well as interviews with high stress risk employees. Some individuals will need occupational medicine specialist service, in some cases even psychologist, which is secondary, that is, reactive action against stress in case of an individual under stress or exposed to stressrisk. Primary or proactive action against stress at work cannot be and need not be removed since in a lower degree it can positively affect creativity, quality, concentration and productivity. Usual steps in removing the danger, harmfulness and strain at work are undoubtedly their elimination, reduction, isolation, control, information and consultation.

After analysis, the committee chooses the measures (the fifth step) for stressogenic factors reduction according to the so-called SMART criteria (S-specific; M-measurable; A-attainable; R-
realistic; T–time-bound) [31]. EU studies point out that the measures taken to reduce psycho-
physiologic strain in the workplace and health promotion that result in changes of lifestyle
increase productivity and profitability and reduce fluctuation as such workplaces are regarded
as the “chosen workplaces” [21]. Health promotion at work is a primary measure for psychosocial
risk reduction in the workplace. European network for health promotion at work gives support
to professionals and non-professionals in the field, at the national level [32].

**A-organizational measures** are primary measures for stress reduction at work. Employer and
managers should stimulate and be a role model for using a holiday and break at work,
discourage overtime and insist on reconciliation of family life and work. Bigger organizations
invest their money in building kindergartens and its equipment, centres for physical training,
which, along with health promotion, have positive impact on employees’ work.

**B-organizational** measures are primary and secondary measures for stress reduction in the
workplace. Strictly speaking “organizational measures” refer to a suitable workplace, work
conditions and methods of work of the employees, for example, working hours, work post,
lighting, noise and clear work instructions. Bigger organizations in developed European and
US states have introduced the employee assistance program (EAP). It enables the employees
with the family problems and problems at work to turn to professional assistants for help for
free [33].

**Individual** measures include changing the attitude, methods of work and code of conduct.
The contribution of management is seen in education of employees in conducting a conflict,
team building and education of team leaders. In Denmark, managers have longer sick leaves
and more claims for recognition of professional stress [10]. Education and exercises teach the
employees the techniques of stress reduction, relief and relaxation. Efficiency of individual
measures for absenteeism reduction is proved [34]. Considerable number of jobs, especially in
growing service industry, require emotional strain at work. These jobs require “empathy and
sensibility”, and emotional stress does not end with finishing work [33, 35]. They are jobs which
cause frustration and the feeling of helplessness, jobs in which the employees are faced with
extreme situations, so they need some time to move away from their job. Traumatic events like
accidents and attacks in the workplace demand special measures starting from step-by-step
procedure for incidents. It was found that traumatic experience caused post-traumatic stress
syndrome in 87% of the employees [10]. Individual techniques for stress reduction and frequent
15 min breaks at work to do some physical exercises turned to be very efficient [33]. Individual
measures at work help in reduction of home-related stress, such as divorce, moving a house
and death of a close relative. Not only employers with mental illnesses or disorders should be
included in the working process regardless of the cause being at work or outside work, but
also the unemployed with chronic mental disorders.

**Return to work** of the employees with mental illness or disorders requires a number of
adjustments, from working hours to education of managers and from trainings of the group
of the employees to which such employee would join, to psychological support.

**Evaluation of measures** (the sixth step) will show if the committee has selected and worked
out suitable measures and if their implementation has led to the desired goal, that is, to the
reduction in psychosocial risks at work and reduction in stress in the workplace or work-related stress.

Committee analysis of the results of the measures taken the seventh step should answer the question of profitability of the measures.

All those results will define a new term to start evaluation of psychosocial risks/stress at work (the eighth step).

Tradition and experience in safety at work of occupational medicine specialist are exceptionally powerful element in fighting stress at work, which is recognized in EU project “Jointaction WP6-mental health at work (personal data)”. Also, it should be mentioned that mental health is obligatory part of education of occupational medicine specialist. Considering all obtained results and experience from other countries, we can say that by implementing all mentioned methods, measures and procedures for stress reduction at work and the acquired experience as well as education and evaluation of all results and within the existing legal framework, occupational medicine specialist can make a big step forward towards the stress reduction at work and achieve its primary goal.

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