

STRESS IN WORKPLACE - POSSIBLE PREVENTION

Mirjana Arandelović, Ivana Ilić

*Institute of Occupational Health Niš
E-mail: amima@eunet.yu*

Summary. *Assuming that stress is a misfit between the demands of the environment and the individual's abilities, the imbalance may be corrected, according to the situation, either by adjusting external demands to fit the individual or by strengthening the individual's ability to cope, or both. At this point, it should be borne in mind that since stress is a multifaceted phenomenon, no simple solution is available. Furthermore, differences in the particular circumstances of each case make it impossible to provide a unique solution for the management of stress. In general, and regardless of their differences, publications conclude that the ideal solution to combat stress is to prevent its occurrence. This may be achieved by tackling the core of the problem - the cause. However, there is no single cause of stress and the elimination of all stressors is a utopian task. Therefore, action should be aimed at eliminating as many causes as possible, so that the action taken reduces stress and prevents future stress. As this cannot always be achieved in the short term, it is generally agreed that improving the ability to cope with stress is a valuable strategy in the process of combating stress. The manual can then go on to identify a series of essential steps for the prevention of stress. These include: stress recognition, stress assessment, anti-stress intervention, monitoring and evaluation. With a view to such assessment, several manuals propose involving workers in identifying those stressors which, they feel, cause unnecessary stress in their jobs and in rating them to establish priorities for intervention. The assessment should be done in an "audit" of the relevant hazards, and employees should be asked to express their concern about any situation that may be causing stress at work. Once the existence of stress has been recognized and the stressors identified, action to deal with stress should be taken. Wide-ranging types of interventions may thus be considered in the manuals, leaving the choice of the most effective combination to the target audience according to the specific features of the particular work situation. The following is a possible list of types of intervention, ranging from interventions targeted at the work environment to those targeted at the individual: Intervention of the external socio-economic environment, intervention on technology and work organization, intervention in working place and task structure, intervention to improve individual responses and behaviour, specific intervention for health protection and promotion.*

Key words: *Stress, workplace, prevention*

"An ounce of prevention is worth a pound of cure"

Lennart Levi

What's the problem?

Can "workplace stress" be defined?

"Workplace stress" then is the harmful physical and emotional responses that can happen when there is a conflict between job demands on the employee and the amount of control an employee has over meeting these demands. In general, the combination of high demands in a job and a low amount of control over the situation can lead to stress.

Stress in the workplace can have many origins or come from one single event. It can impact on both employees and employers alike. As stated by the Canadian Mental Health Association: Fear of job redundancy, layoffs due to an uncertain economy, increased demands for overtime due to staff cutbacks act as negative stressors. Employees who start to feel the "pressure to per-

form" can get caught in a downward spiral of increasing effort to meet rising expectations with no increase in job satisfaction. The relentless requirement to work at optimum performance takes its toll in job dissatisfaction, employee turnover, reduced efficiency, illness and even death. Absenteeism, illness, alcoholism, "petty internal politics", bad or snap decisions, indifference and apathy, lack of motivation or creativity are all by-products of an over stressed workplace (1).

Stress can be both good and bad.

Is this true?

It is generally believed that some stress is okay (sometimes referred to as "challenge" or "positive stress").

You should not assume that stress is always a bad thing. Stress comes with work and family responsibilities and is unavoidable. It keeps us motivated and can provide a great sense of achievement once the stressful situation has passed. Stress also increases the level of

energy and muscle tension in our body, improving our ability to concentrate and meet demands. Stress in these situations is the kind that helps you "rise" to a challenge and meet your goals such as deadlines, sales or production targets, or finding new clients. Some people would not consider this challenge a type of stress because, having met the challenge, we are satisfied and happy. However, as with most things, too much stress can have negative impacts. When the feeling of satisfaction turns into exhaustion, frustration or dissatisfaction, or when the challenges at work become too demanding, we begin to see negative signs of stress (2).

Who is affected by stress?

All of us are affected at one time or another by work-related stress. Although occupational stress is by no means a new phenomenon, it is becoming increasingly globalized and affects all countries, all professions and all categories of workers, including both blue and white-collar workers, as well as families and society in general. While stress at work is most frequently considered in the context of the industrialized countries, workers in developing countries are also undoubtedly affected.

The evidence also indicates that a broad and growing range of occupations are prone to work-related stress. The ILO has also commissioned a series of manuals on the prevention of work-related stress in various sectors and occupations: air traffic controllers, assembly line workers, bus drivers, offshore oil and gas workers and nursing. The following table lists those occupations which equal or exceed the rate of 6 on a stress rating scale of 0 to 10 elaborated by the University of Manchester Institute of Science and Technology (3) (Table 1).

Table 1. Occupations with high stress levels

Occupation	Rating scale
Miner	8.3
Police officer	7.7
Prison officer	7.5
Construction worker	7.5
Airline pilot	7.5
Journalist	7.5
Advertising executive	7.3
Dentist	7.3
Actor	7.2
Doctor	6.8
Broadcasting personnel	6.8
Nurse	6.5
Film production crew	6.5
Ambulance personnel	6.3
Musician	6.3
Firefighter	6.3
Teacher	6.2
Social worker	6.0
Personnel manager	6.0

Source: Conditions of work digest: Preventing stress at work

The *Digest* is the ILO's main publication in the field of stress prevention at work. It was at the forefront of research and development work in its advocacy of stress prevention rather than curative interventions. Its extensive case studies of stress prevention programmes are unique and the *Digest* continues to be cited as an authority in all the main publications on work-related stress. It contains articles by many of the most eminent experts on workplace stress. The *Digest* contains: an introduction to the subject of stress at work, which identifies *trends* and *issues* in an international perspective; an analysis of *19 case studies* on preventive anti-stress programmes in Canada, Germany, India, Italy, Japan, Mexico, Sweden, United Kingdom and United States. These cases illustrate positive examples of how stress is tackled within the workplace, the different types of intervention, the role of the parties involved and the impact of the anti-stress programmes. To measure work stress, the Job Content Questionnaire (JCQ) was used to obtain scales for the main dimensions for work stress risks—that is. The scales of Job Demands, Decision Authority (partly), Skill Discretion, and Terms of Employment (partly), are from the Job Content Questionnaire (Karasek 1985). Also the questions on social support were included (4,5).

Manuals on prevention and treatment of occupational stress

The manual will need to refer to a definition of stress. However, defining stress is a very complex matter which is the subject of different analyses and continuous debate among experts. Beyond the details of this debate, a general consensus can be reached about a definition of stress which is centred around the idea of a perceived imbalance in the interface between an individual, the environment and other individuals. When people are faced with demands from others or demands from the physical or psycho-social environment to which they feel unable to adequately respond, a reaction of the organism is activated to cope with the situation. The nature of this response depends upon a combination of different elements, including the extent of the demand, the personal characteristics and coping resources of the person, the constraints on the person in trying to cope and the support received from others. The emerging approach, however, focuses on a pro-active response to stress with emphasis on preventive measures and elimination of the causes of stress, rather than on the treatment of its effects and coping with stress (6).

The many manuals which have been produced on the prevention of occupational stress address the subject in different ways, converting a wide range of contents, target groups and styles of presentation. For instance, some publications are very comprehensive and discuss, in detail, various methods used to deal with stress at different levels, while others focus on specific aspects, such as a strategy for stress reduction.

Despite all these differences, manuals on stress usually take the subject in the following sequence. First of all, the signs and symptoms of stress are analysed, and indications are provided on its magnitude and cost, with a view to helping readers to recognize the existence of stress and the need for action. Secondly, the causes of stress or stressors are reviewed, in order to facilitate their identification, and the consequences of stress are assessed. Thirdly, after some understanding about stress has been grasped, action to eliminate or relieve stress is discussed (7,8).

The manual can then go on to identify a series of essential steps for the prevention of stress. These include:

- stress recognition;
- stress assessment;
- anti-stress intervention;
- monitoring and evaluation.

Stress recognition

The importance of early recognition of the signs and symptoms of stress is broadly emphasized in the literature. Manuals, in more or less detail, discuss signs and symptoms in the individual and in the workplace which indicate that stress is present and that it is necessary to act. Even though each of the signs and symptoms of stress may be due to other factors, the occurrence of several of these signs and symptoms at once may require the need to take anti-stress action.

At the individual level the following physical, behavioural, mental and emotional signs may be apparent:

Physical symptoms

- Headaches
- Digestive problems
- Sleep deprivation
- Constipation
- Rashes or hives
- Heartburn
- Night sweats
- Diminished sexual desire
- Difficulty with orgasm
- Menstrual irregularities
- Chronic back pain
- Other muscle tensions
- Loss of appetite
- Weight gain
- High blood pressure
- Tics

Emotional or mental symptoms

- Increased anger
- Frustration
- Depression
- Moodiness
- Anxiousness
- Guilt
- Loneliness
- Problems with memory

- Fatigue
- Lowered self-esteem
- Increased use of nicotine/alcohol/drugs
- Excessive worrying
- Easily startled
- Day-dreaming

Work-related symptoms

- Frequent lateness
- Increased absenteeism
- Social withdrawal at the workplace
- Overreaction to small things
- Accidents on the job
- Complaints from coworkers
- Decrease in work productivity
- Taking longer to complete deadlines and daily job functions
- Difficulty in recalling instructions, and understanding office procedures
- On the job absenteeism (You are physically at work, but have difficulty concentrating on the job)
- Taking long coffee breaks
- Excessive personal time on the telephone or Internet

Stress assessment

Given that the goal of any stress control programme is to manage specific causes of stress and their effects, related to both the work situation and the personal characteristics of the individual, an effective programme requires proper identification of the stressors causing high-stress situations and assessment of the work performance and personal problems derived from stress (9).

With a view to such assessment, several manuals propose involving workers in identifying those stressors which, they feel, cause unnecessary stress in their jobs and in rating them to establish priorities for intervention. The assessment should be done in a systematic way and employees should be asked to express their concern about any situation that may be causing stress at work.

In this respect, recourse to an "audit" of the relevant hazards, as exemplified in the following checklist can prove particularly helpful (10) (Table 2).

Anti-stress intervention

Once the existence of stress has been recognized and the stressors identified, action to deal with stress should be taken. Assuming that stress is a misfit between the demands of the environment and the individual's abilities, the imbalance may be corrected, according to the situation, either by adjusting external demands to fit the individual or by strengthening the individual's ability to cope, or both. At this point, it should be borne in mind that since stress is a multifaceted phenomenon, no simple solution is available. Furthermore, differences in the particular circumstances of each case make it impossible to provide a unique solution for the management of stress (11).

Table 2. Occupational stress check list

Work characteristic	Hazardous conditions (High likelihood conditions)	Absent/Low -or- Present/Medium -or- Obvious/Severe (please specify)
Organizational function and culture	Poor communications Organization as poor task environment Poor problem-solving environment Poor development environment	
Participation	Low participation in decision-making	
Career development and job status	Career uncertainty Career stagnation Poor status work Work of low social value Poor pay Job insecurity or redundancy	
Role in organization	Role ambiguity: not clear on role Role conflict Responsibility for others or continual contact with other people	
Job content	Ill-defined work High uncertainty Lack of variety Fragmented work Meaningless work Under-utilization of skills Physical constraint	
Workload and work pace	Work overload Work underload High levels of pacing Lack of control over pacing Time pressure and deadlines	
Working time	Inflexible work schedule Unpredictable hours Long hours or unsocial hours Shift/Night working	
Interpersonal relationships at work	Social or physical isolation Lack of social support from other staff Conflict with other staff Violence Poor relationships with supervisors and managers	
Home-work interface	Conflicting demands of work and home Low social or practical support from home Dual career problems	
Preparation and training	Inadequate preparation for dealing with more Difficult aspects of job Concern about technical knowledge and skill	
Other problems	Lack of resources and staff shortages Poor work environment (lighting, noise, bad postures)	

*Some internal situations that cause work-related stress include: having unrealistic expectations of yourself, having unrealistic expectations of the job, being unaware of your limitations and shortcomings.

Source: T. Cox and A. Griffith: Manual on Occupational Stress in Nursing, ILO, 1996.

A wide range of practical guidance on the management of stress is found in the literature. In general, and regardless of their differences, publications conclude that the ideal solution to combat stress is to prevent its occurrence. This may be achieved by tackling the core of the problem - the cause. However, there is no single cause of stress and the elimination of all stressors is a utopian task. Therefore, action should be aimed at eliminating as many causes as possible, so that the action taken reduces stress and prevents future stress. As this cannot always be achieved in

the short term, it is generally agreed that improving the ability to cope with stress is a valuable strategy in the process of combating stress (12).

Wide-ranging types of interventions may thus be considered in the manuals, leaving the choice of the most effective combination to the target audience according to the specific features of the particular work situation. The following is a possible list of types of intervention, ranging from interventions targeted at the work environment to those targeted at the individual (13,14).

Intervention of the external socio-economic environment

- Legislation, international and national directives
- Social support

Intervention on technology and work organization

- Improving job planning and reliability of the work systems
- Reduction of working times and arrangement of working teams and rest pauses in relation to the work load
- Arrangement of shift schedules according to psych-physiological and social criteria
- Participation in decision-making

Intervention in working place and task structure

- Improving the work environment
 - Lighting
 - Noise
 - Micro climatic conditions and indoor air quality
- Arranging workplaces according to ergonomic criteria
 - Workstation design
 - Working with visual display units
 - Sitting postures

Intervention to improve individual responses and behaviour

- Individual ways of coping with stress
- Selection and training
- Counseling and other supporting measures at the company level

Specific intervention for health protection and promotion

- Appropriate medical surveillance

Since practically all the above-mentioned measures can, in principle, be beneficial for all the occupations affected by stress, particular attention needs to be paid to avoiding the risk of generalization. Each manual should therefore deal with the specific measures relevant to the particular occupation under consideration (i.e. if improved organization of working time is referred to as a measure for the prevention of stress for nursing personnel performing shift work, practical shift arrangements should be proposed) (15,16).

Monitoring and evaluation

Finally, it is important for manuals to propose effective monitoring and evaluation systems. A distinction is usually made between active (process) and reactive (outcome) monitoring systems.

Reactive systems tend to monitor accidents, ill health and incidents. They generally recognize and re-

port on, inter alia, injuries and cases of ill health and other losses, such as damage to property, incidents and the existence and nature of potential hazards. Ensuring the reporting of serious injuries, or long-term illness, generally presents few problems to organizations, although the validity of stated diagnoses may sometimes be questionable. However, the reporting of minor injuries, other loss events, incidents and hazards tends to prove more difficult. Active systems are therefore needed to monitor the achievement of plans and the extent of compliance with procedures and standards. These should be process-oriented and provide feedback on occupational health performance before accidents, ill health or incidents occur (17,18).

Special emphasis is usually placed on the importance of active monitoring. However, both types of measurement are required and these should be properly integrated into a coherent system of monitoring according to the particular characteristics of the occupation covered by the manual.

Some effort is required in the design of monitoring systems to allow for evaluation.

Monitoring and reporting of hazards and occupational health problems can be promoted by a number of different factors, including training and organizational development. First, training can serve to clarify the nature and requirements of the monitoring system. Second, the development of a health and safety-conscious organizational culture serves to emphasize the importance of an observant and responsive approach to occupational health and of improving systems of control and monitoring before harm occurs. It should also encourage open and honest communication (19,20).

Conclusion

The enormous human and economic costs associated with occupational stress suggest that initiatives designed to prevent and/or reduce employee stress should be high on the agenda of workplace health promotion programmes. The response therefore needs to be directed at the causes rather than the effects of stress at work. It should concentrate on the adoption of preventive, systematic and participative interventions. Wide-ranging types of interventions may be considered, leaving the choice of the most effective combination to the specific features of the particular work situation.

It is essential that action be undertaken at different levels. At the primary level, action is needed to identify and address problems at the level of the organization and the environment, with a view to preventing stress at work. At the secondary level, interventions can be developed to help individual employees or groups of employees coping with stress and at the tertiary level, assistance can be provided to employees to help cure the symptoms of stress and to workers who have been subject to violence to recover from it.

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STRES NA RADNOM MESTU – MOGUĆA PREVENCIJA

Mirjana Arandelović, Ivana Ilić

Institut za medicinu rada-Niš

E-mail: amima@eunet.yu

Kratak sadržaj: *Ako je profesionalni stres sukob zahteva radne sredine i sposobnosti pojedinca, pretpostavka je da se ovaj disbalans može korigovati, prema situaciji, bilo prilagođavanjem zahteva sredine tako da odgovaraju zaposlenom ili osposobljavanjem radnika da se nosi sa stresom, ili pomoću oba pristupa. U ovakvom pristupu, treba imati na umu da nema jednostavnih rešenja zbog toga što je stres kompleksan fenomen. Uz to, razlike u okolnostima svakog od slučajeva onemogućavaju iznalaženje jedinstvenog rešenja za zbrinjavanje stresa. No, bez obzira na njihove razlike, iskustvo istraživača ove pojave ukazuje da je idealno rešenje u borbi protiv stresa njegova prevencija. To se može postići pristupanjem uzroku problema. Međutim, stres može imati mnogo uzroka, a ideja o eliminisanju svih stresora predstavlja utopiju. Zbog toga, delovanje treba usmeriti ka eliminisanju što je više uzroka moguće, tako da preduzete aktivnosti smanje postojeći i preveniraju budući stres. Kako se ovo ne može uvek postići za kratko vreme, čini se da je konsenzus za poboljšavanje sposobnosti radnika da se izbori sa stresom vredna strategija u procesu borbe protiv stresa. Program prevencije po konsensusu treba da sadrži seriju ključnih koraka. Oni obuhvataju: prepoznavanje stresa, procenu stresa, antistresnu intervenciju, nadzor i evaluaciju. Preporuke za procenu stresa sugerišu upotrebu "sistematskog pregleda", uključivanje i zainteresovanost radnika za identifikaciju onih faktora koji, po njihovom osećanju, uzrokuju nepotreban stres na radnim mestima i njihovo rangiranje kako bi se ustanovili prioriteta za intervenciju. Kako se prepozna prisustvo stresa i identifikuju stresori, treba preduzeti mere za borbu protiv stresa. U uputstvima se razmatraju najrazličitije vrste intervencija, ostavljajući izbor najefikasnije kombinacije prema ciljnoj populaciji u skladu sa specifičnim karakteristikama date situacije u radnom okruženju. Moguća lista intervencija po tipovima, od onih usmerenih na radno okruženje do onih koje se odnose na individuu sadrži: intervencije u oblasti zakonodavstva i socijalne podrške, intervencije u oblasti tehnologije i organizacije posla, intervencije na radnom mestu u smislu poboljšanja radne sredine i aranžiranja radnih mesta prema ergonomske kriterijumima, intervencije na poboljšavanju individualnih odgovora i ponašanja i specifične intervencije na zaštiti i promociji zdravlja.*

Ključne reči: *stres, radno mesto, prevencija*