The European Commission's Guidance on work-related stress: from words to action

Lennart Levi*

Introduction - Background

In the Constitution of the World Health Organization (WHO), health is defined as 'a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity'. There is no doubt whatsoever that working life and its conditions are powerful determinants of health, for better or for worse. The relationship works both ways. Work affects health. But health more often than not also affects a person's productivity and earning capacity as well as their social and family relationships. Needless to say, this holds true for all aspects of health, both physical and mental.

In 2000, the European Commission published its Guidance on work-related stress. Spice of life or kiss of death1, in English, French, German, Italian and Spanish. This development had its roots in a major European Conference held in Brussels on 9-10 November 1993, on "Stress at work – A call for action", organized jointly by the European Foundation, the European Commission and the Belgian Labour Ministry, and supported by the Belgian Presidency of the Council of Ministers. The conference highlighted the increasing impact of stress on the quality of working life, employees' health and company performance. Special attention was paid to stress monitoring and prevention at company, national and European level. Instruments and policies for better stress prevention were presented and discussed. Finally, a round table on "Future perspectives on stress at work in the European Community" brought together representatives from national governments, the European Commission, UNICE, CEEP, ETUC and the Foundation.

Based on what came out of these deliberations, the Commission set up an ad hoc group to the Advisory Committee on Safety and Health on "Stress at work". The ad hoc group proposed, and the Advisory Committee endorsed, that the Commission should draw up "Guidance" in this field. The author is proud to have had a hand in the above developments.

The present situation

The many causes and consequences of work-related stress are widespread in the 15 European Union Member States. Over half the EU's 160 million workers report working at very high speeds (56%), and to tight deadlines (60%). More than a third have

no influence on task order. 40% report having monotonous tasks. Such work-related "stressors" are likely to have contributed to the present spectrum of ill health: 15% of the workforce complain of headaches, 23% of neck and shoulder pains, 23% of fatigue, 28% of "stress", and 33% of backache (European Foundation, 2001), plus a host of other illnesses, including life-threatening ones.

Sustained work-related stress is an important determinant of *depressive disorders*. Such disorders are the fourth biggest cause of the global disease burden. They are expected to rank second by 2020, behind ischaemic heart disease, but ahead of all other diseases (World Health Organization, 2001). In the 15 EU Member States, the cost of these and related mental health problems is estimated to average 3-4% of GNP (ILO, 2000), amounting to approximately 265 *billion euros a year* (1998).

It is also likely that sustained work-related stress is an important determinant of *metabolic syndrome* (Folkow, 2001; Björntorp, 2001). This disorder features a combination of: accumulation of abdominal fat; a decrease in cellular sensitivity to insulin; dyslipidemia (increased levels of LDL cholesterol and triglycerides, and lowered levels of HDL cholesterol); and raised blood pressure, probably contributing to *ischaemic heart disease* and *Diabetes Type 2* morbidity.

In these ways, virtually every aspect of work-related health and disease can be affected. Such influences can also be mediated through emotional, and/or cognitive *misinterpretation* of work conditions as threatening, even when they are not, and/or trivial symptoms and signs occurring in one's own body as manifestations of serious illness. All this can lead to a wide variety of disorders, diseases, loss of wellbeing and loss of productivity. Examples discussed in some detail in the CEC Guidance include ischaemic heart disease, stroke, cancer, musculoskeletal and gastrointestinal diseases, anxiety and depressive disorders, accidents, and suicides.

The European Commission's Guidance

What is stress?

According to the CEC Guidance, stress consists of a pattern of "stone-age" reactions preparing the human organism for fight or flight, i.e., for physical activity, in response to stressors, i.e., demands and influences that tax the organism's adaptational

* Karolinska Institutet, Stockholm, Sweden

URL: http://www.europa.eu.int/comm/employment_social/h&s/publicat/pubintro_en.htm

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capacity. "Stress" comprises the common denominators in an organism's adaptational reaction pattern to a variety of such influences and demands. Stress was adequate when stone-age man was facing a wolf pack, but not so when today's worker is struggling to adjust to rotating shifts, highly monotonous and fragmented tasks, or threatening or over-demanding customers. If sustained, it is often maladaptive and even disease-provoking.

As mentioned above, health and wellbeing can be influenced by work, both positively (spice of life) and negatively (kiss of death). Work can provide goal and meaning in life. It can give structure and content to our day, week, year, and life. It may offer us identity, self-respect, social support, and material rewards. This is likely to happen when work demands are optimal (and not maximal), when workers are allowed to exercise a reasonable degree of autonomy, when the "climate" of the work organisation is friendly and supportive, and when the worker is adequately rewarded for his or her effort. When this is so, work can be one of the most important health-promoting (salutogenic) factors in life.

If, however, work conditions are characterised by the *opposite* attributes, they are – at least in the long run – likely to cause, accelerate the course or trigger the symptoms of ill health. *Pathogenic mechanisms* include *emotional* reactions (anxiety, depression, hypochondria, and alienation), *cognitive* reactions (loss of concentration, recall, inability to learn new things, be creative, make decisions), *behavioural* reactions (abuse of drugs, alcohol, and tobacco, destructive and self-destructive behaviour, refusal to seek or accept treatment, prevention, and rehabilitation), and *physiological* reactions (neuroendocrine and immunological dysfunction, such as persistent sympathotonia and/or a dysfunctional hypothalamic-pituitary-adrenal axis²).

Can work-related stress be prevented?

Work-related stress can be approached on four levels the individual worker, the work organisation, the nation, and the European Union. Whatever the target(s), conditions are usually man-made and open to interventions by all relevant stakeholders.

According to the Guidance, there is a need, at all levels, to identify work-related stressors, stress reactions, and stress-related ill health. There are several reasons for doing this: stress is a problem for workers, their work organisation and society alike; work stress problems are on the increase; it is a legal obligation under the EU Framework Directive on Health and Safety; and many of the stressors and consequences

are avoidable and can be adjusted by all three parties on the labour market if they act together in their own and mutual interests.

According to the EU Framework Directive, employers have a "duty to ensure the safety and health of workers in every aspect related to the work". The Directive's principles of prevention include "avoiding risks", "combating the risks at source", and "adapting the work to the individual". In addition, the Directive indicates the employers' duty to develop "a coherent overall prevention policy". The European Commission's Guidance aims at providing a basis for such endeavours.

Based on surveillance at individual workplaces and monitoring at national and regional levels, workrelated stress should be prevented or counteracted by job-redesign (e.g., by empowering the employees, and avoiding both over- and underload), by improving social support, and by providing reasonable reward for the effort invested by workers, as integral parts of the overall management system. And, of course, by adjusting occupational physical, chemical and psychosocial settings to the workers' abilities, needs and reasonable expectations - all in line with the requirements of the EU Framework Directive and Article 152 of the Treaty of Amsterdam, according to which "a high level of human health protection shall be ensured in the definition and implementation of all Community policies and activities".

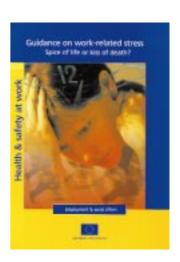
Supporting actions include not only research, but also adjustments of curricula in business schools, schools of technology, medicine and behavioural and social sciences, and in the training and retraining of labour inspectors, occupational health officers, managers and supervisors, in line with such goals.

Tools to prevent stress

To identify the existence, causes and consequences of work-related stress, we need to *monitor* our job content, working conditions, terms of employment, social relations at work, health, well-being and productivity. The CEC Guidance provides many references to checklists and questionnaires to enable stakeholders to do this. Once the parties on the labour market know 'where the shoe pinches', action can be taken to 'adjust the shoe' to fit the 'foot', i.e. to improve stress-inducing conditions in workplaces.

The Guidance argues that much of this can be accomplished through organisational changes, e.g., by:

- Allowing adequate time for the worker to perform his or her work satisfactorily.
- Providing the worker with a clear job description.
- Rewarding the worker for good job performance.



² Hypothalamus: a part of the brain that regulates bodily temperature and other autonomic activities; pituitary: a small endocrine gland, whose secretions control other endocrine glands; adrenal glands: two small endocrine glands, secreting cortisol, adrenaline, noradrenaline and other hormones.

- Providing ways for the worker to voice complaints and have them considered seriously and swiftly.
- Harmonising the worker's responsibility and authority.
- Clarifying the work organisation's goals and values and adapting them to the worker's own goals and values, whenever possible.
- Promoting the worker's control, and pride, over the end product of his or her work.
- Promoting tolerance, security and justice at the workplace.
- Eliminating harmful physical exposures.
- Identifying failures, successes, and their causes and consequences in previous and future health action at the workplace; learning how to avoid the failures and how to promote the successes, for a step-by-step improvement of occupational environment and health (Systematic work environment management, see below).

On a company or national level, all three parties on the labour market may wish to consider organisational improvements to prevent work-related stress and ill health, with regard to:

- Work schedule. Design work schedules to avoid conflict with demands and responsibilities unrelated to the job. Schedules for rotating shifts should be stable and predictable, with rotation in a forward (morning-afternoon-night) direction.
- Participation/control. Allow workers to take part in decisions or actions affecting their jobs.
- Workload. Ensure assignments are compatible with the worker's own capabilities and resources, and allow for recovery from especially demanding physical or mental tasks.
- Content. Design tasks to provide meaning, stimulation, a sense of completeness, and an opportunity to use skills.
- Roles. Define work roles and responsibilities clearly.
- Social environment. Provide opportunities for social interaction, including emotional and social support and help between fellow workers.
- Future. Avoid ambiguity in matters of job security and career development; promote life-long learning and employability.

Systematic work environment management

According to the Guidance, actions to reduce noxious work-related stress need not be complicated, time consuming, or prohibitively expensive. One of the most common-sense, down-to-earth and low-cost approaches is known as *Systematic work environment management*. It is a self-regulatory process, carried out in close collaboration between stakeholders. It can be coordinated by, e.g., an in-house occupational health service or a labour inspector, or by an occupational or public health nurse, a social worker, a physiotherapist, or a personnel administrator.

The first step is to *identify* the incidence, prevalence, severity and trends of work-related stressor exposures and their causes and health consequences, e.g., by making use of some of the survey instruments listed in the CEC Guidance. Then, the characteristics of such exposures as reflected in the content, organisation and conditions of work are analysed in relation to the outcomes found. Are they likely to be necessary, or sufficient, or contributory to work-stress and stress-related ill health? Can they be changed? Are such changes acceptable to relevant stakeholders? In a third step, the stakeholders may design an integrated package of interventions, and implement it in order to prevent work-related stress and to promote both wellbeing and productivity, preferably by combining top-down and bottom-up approaches.

The short- and long-term outcomes of such interventions then need to be evaluated, in terms of (a) stressor exposures, (b) stress reactions, (c) incidence and prevalence of ill health, (d) indicators of wellbeing, and (e) productivity with regard to the quality and quantity of goods or services. Also to be considered are (f) the costs and benefits in economic terms. If the interventions have no effects, or negative ones in one or more respects, the stakeholders may wish to rethink what should be done, how, when, by whom and for whom. If, on the other hand, outcomes are generally positive, they may wish to continue or expand their efforts along similar lines. It simply means systematic learning from experience. If they do so over a longer perspective, the workplace becomes an example of organisational learning.

Experiences with such interventions are generally positive, not only for the employees and in terms of stress, health and wellbeing, but also for the function and success of work organisations, and for the community. If conducted as proposed, they are likely to create a win-win-win situation for all concerned.

Recent initiatives

This overall approach of the guidance on stress was further endorsed in the Swedish Presidency conclusions (2001), which said that "employment not only involves focusing on more jobs, but also on better jobs. Increased efforts should be made to promote a good working environment for all, including equal opportunities for the disabled, gender equality, good and flexible work organisation permitting better reconciliation of working and personal life, lifelong learning, health and safety at work, employee involvement and diversity in working life".

The subsequent Belgian Presidency initiated another European Conference, in Brussels on 25-27 October 2001 on "coping with stress- and depression-related problems in Europe". Based on its "conclusions", The European Council of Health Ministers in its recent "Conclusions" (2001) invited the EU Member States to "give special attention to the increasing problem of work-related stress and depression".

In its report *Mental health in Europe*, the World Health Organization (2001) similarly emphasizes that "mental health problems and stress-related disorders are the biggest overall cause of early death in Europe. Finding ways to reduce this burden is a priority". And, even more recently, the Executive Board of the World Health Organization (2002) resolved that "mental health problems are of major importance to all societies and to all age groups and are significant contributors to the burden of disease and the loss of quality of life; they are common to all countries, cause human suffering and disability, increase risk of social exclusion, increase mortality, and have huge economic and social costs".

Three complementary European approaches to work stress related ill health

An obvious interlocking question is -how the above objectives will be achieved? The answer to this question is considered in three recent European documents:

- the European Commission's (CEC) *Guidance on Work-Related Stress* (2000), considered extensively above;
- the European Standard (EN ISO 10075-1 and 2) on Ergonomic Principles Related to Mental Work Load (European Committee for Standardization, 2000); and
- the European Commission's Green Paper on Promoting a European Framework for Corporate Social Responsibility (2001).

Let us consider the last two and compare their implications for the protection and promotion of occupational health and well-being.

European standard on mental work load

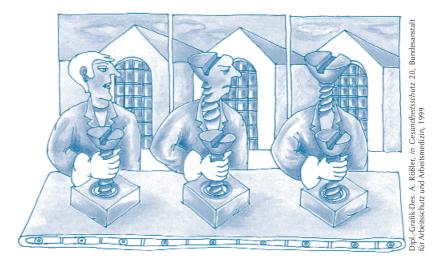
The International series of the Standard ISO 10075, Part 1³ and 2⁴ related to mental work load have been adopted and published as *European Standards* by CEN on July and March 2000. The CEN members are thereby giving this Standard the status of a national standard without any alteration.

This Standard defines *mental stress* as "the total of all assessable influences impinging upon a human being from external sources and affecting it mentally". *Mental strain* is correspondingly defined as "the

immediate effect of mental stress within the individual (not the long-term effect) depending on his/her individual habitual and actual preconditions, including individual coping styles". The Standard lists some "facilitating" and "impairing" (short-term) effects of mental strain. The former include "warming-up effects" and "activation", whereas the latter comprise "mental fatigue", and "fatigue-like states" such as "monotony", "reduced vigilance" and "mental satiation".

According to the Standard, the consequences of mental strain also include other consequences, e.g., boredom and feelings of being overloaded, which are, however, not dealt with in the Standard, "due to large individual variation, or to as yet inconclusive results of research". The same is said to apply to "possibly unfavourable long-term effects of repeated exposure to mental strain being either too high or too low".

In its "general design principles", the Standard emphasizes the need to fit the work system to the user, and in doing this, to utilize his or her experiences and competencies, e.g. by using methods of participation. These principles should be applied in order to influence (a) the intensity of the workload, and (b) the duration of the exposure to the workload. Personal factors, like abilities, performance capacities, and motivation will influence the resulting workload. Accordingly, the work system design starts with a function analysis of the system, followed by function allocation among operators and machines, and task analysis, and results in task design and allocation to the operator.



The Standard points out that mental workload is not a one-dimensional concept but has different qualitative aspects leading to different qualitative effects. The Standard provides guidelines concerning fatigue, monotony, reduced vigilance, and satiation. It presents their determinants in considerable detail and exemplifies them.

³ EN ISO 10075-1: Ergonomic principles related to mental work-load- Part 1: General terms and definitions.

⁴ EN ISO 10075-2: Ergonomic principles related to mental work-load- Part 2: Design principles.

Corporate Social Responsibility in Europe

The European Round Table of Industrialists (ERT, 2001), commenting on the European Commission's (2001-a) Green Paper on Corporate Social Responsibility, concludes that healthy, profitable, forward-thinking companies have a key contribution to make to the Lisbon goal of Europe becoming the "most competitive and dynamic knowledge-based economy in the world" by 2010. Such companies have recognised that, in order to operate successfully, they must satisfy the three elements of sustainable development: financial, environmental and social. According to ERT, this is the essence of what might most accurately be referred to as responsible corporate conduct, rather than "Corporate Social Responsibility", the term used by the European Commission. Failure to satisfy the three elements would lead, over time, to terminal weakness, in terms of credibility and trust amongst stakeholders and internal organisational resources. Recognition of and respect for corporate social responsibility are therefore key to any business interested in building a healthy future for its employees, shareholders and stakeholders in general (ERT, 2001).

According to the European Commission (2001-b), the CSR concept implies that a company conducts its business in a socially acceptable way and is accountable for its effects on all relevant stakeholders. Thus, CSR raises the question of the total impact of an activity on the lives of individuals both within, and external to, the company:

- Within: recruitment and employee retention, wages and benefits, investment in training, working environment, health and safety, labour rights, etc.
- Externally: human rights, fair trading, impact on human health and quality of life, acceptable balance

of benefits and disbenefits for those most affected, sustainable development, etc.

According to the European Commission's Green Paper (2001-a), the strategy's basic message is that long term economic growth, social cohesion and environmental protection must go hand in hand. This has numerous implications for companies' relations with their employees. It involves a commitment to aspects such as health and safety, a better balance between work, family and leisure, lifelong learning, greater workforce diversity, gender-blind pay and career prospects, profit-sharing and share ownership schemes. These practices can have a direct impact on profits through increased productivity, lower staff turnover, greater amenability to change, more innovation, and better, more reliable output. Indeed, a major thread throughout the paper is that companies often have an interest in going beyond minimum legal requirements in their relations with their stakeholders. Peer respect and a good name as employer and firm are highly marketable assets.

A number of other initiatives support the promotion of CSR at the global level, such as the UN Global Compact, the ILO's Tripartite Declaration on Multinational Enterprises and Social Policy, and the OECD Guidelines for Multinational Enterprises. While these initiatives are not legally binding codes of conduct for companies, they benefit (in the case of the OECD guidelines) from the commitment of signatory governments to promote effective observance of the guidelines by business.

In its invitation to discuss these issues, the Belgian EU Presidency (2001) provided a matrix clarifying the three types of responsibilities included and the four categories of actors involved.

	Managers	Workers	Consumers	Investors
Quality	Skills and Training	Workers' expectations	Economic services of general interest	Index, Disclosure, SIF
Convergence	Codes of Conduct	Human Resources Management Reports	Social Labels	Reporting and Rating Criteria
Partnership	Small and Medium Size Enterprises	Social Dialogue	Social and Ethical Clauses in Public Procurement	Pension Funds

Based on such considerations, companies could publish annual "triple bottom line"-reports, addressing financial, environmental and social (including health) issues.

In preparing such a bottom line, they might wish to consider the Social Index (0-100 points) – a self-assessment tool developed by the Danish Ministry of Social Affairs for measuring the degree to which a company lives up to its social responsibilities.

A comparison between the three approaches

The stress-stressor-strain concepts

The European Standard defines "mental stress" as a stimulus – generally in line with the corresponding definition in physics, as "a force that tends to strain or deform a body". The Guidance has chosen the current psycho-socio-biological stress concept originally introduced by Selye (1936), comprising the common denominators in an organism's adaptational reaction pattern to a variety of influences and demands.

According to the European Standard, stress (= the stimulus) induces "mental strain" (= the reaction). The non-specific aspects of the latter is what the Guidance refers to as "stress". The European Standard's "stress" concept equals the Guidance's concept of "stressor". It is, of course, important to point out this fundamental difference between the two sets of definitions, to avoid confusion.

Negative, positive, or neutral connotations

The European Standard emphasizes that its stress concept is regarded as neither intrinsically negative or positive. Depending on the context it can be both or neither. Similarly, the Guidance indicates that stress can be positive ("the spice of life") or negative ("a kiss of death"), depending on the context and between-individual variation.

Unfavourable long-term effects?

The European Standard excludes consideration of possible negative long-term effects because of "the yet inconclusive results of research". The Guidance, prepared almost a decade later, takes the opposite view and presents a wide variety of negative (health) effects of long-term stressor exposures, documenting its claims. The latter evaluation is also in line with the World Health Organization's formulation that "mental health problems and stress-related disorders are the biggest overall cause of early death in Europe".

As can be easily seen, these three approaches are based on different but related paradigms. The European Commission's Guidance has its roots in workers' protection, stress medicine and psychology, and in an ecological or systems approach. The European Standard is based on ergonomics, an applied science of equipment and work process design also intended to improve overall system performance by reducing operator fatigue and discomfort, as well as ensuring their health, safety and wellbeing. And CSR has as its basic core a consideration for ethics and human rights.

The Guidance was prepared with the awareness that "one size does not fit all". It is a "pick-and-mix", a smorgasbord, from which all stakeholders are invited to choose the combination of interventions considered to be optimal in their specific setting, for subsequent evaluation. It chimes with the European Framework Directive and is aimed at preventing work-related ill health and promoting wellbeing and productivity.

The Standard is more specific about what to include, what to promote and how. It refers to all kinds of human work activity with the express aim of "fitting the work system to the user". Without overtly saying as much, it gives the impression that productivity (rather than health or wellbeing) are to be considered the primary outcome. On many points, the Guidance and the Standard overlap, both in terms of objectives and the means by which these objectives should be achieved.

The CSR initiative constitutes a much broader approach, encompassing both employee health and wellbeing and productivity, as well as economic and ecological sustainable development. Although attempts have been made to instrumentalize the CSR concept by providing quantitative and qualitative measures of targets, interventions and outcomes, there is a considerable risk of some stakeholders paying lip service to CSR without taking more than token action.

Even so, all three initiatives constitute important bases for tripartite collaboration for the promotion of high productivity, high occupational and public health and high quality of life.

To conclude: there is an urgent need for preventive measures across societal sectors and levels, aimed at promoting "the healthy job" concept, and humanising organisational restructuring. The challenge to science of all this is to find out what to do, for whom, and how, and to bridge the science-policy gap. The corresponding challenge to all other stakeholders on the labour market is to implement existing evidence in coordinated and sustainable programmes for subsequent evaluation.

References

- Belgian EU Presidency, Corporate social responsibility on the European social policy agenda, Brussels, 27-28 November, 2001.
- Björntorp, P., "Heart and Soul: Stress and the Metabolic Syndrome", *Scand Cardiovasc J*, 35, 172-177, 2001.
- Danish Ministry of Social Affairs, *The* social index measuring a company's social responsibility, Copenhagen, Author, 2000.
- European Commission, *Promoting a European framework for corporate social responsibility, Green Paper*, Luxembourg, Office for Official Publications of the European Communities, 2001.
- European Commission, Corporate Social Responsibility – General Information, Brussels, Author, 2001 b.
- European Committee for Standardization, Ergonomic principles related to mental work-load – Part 1: General terms and definitions (EN ISO 10075-1) and Part 2: Design principles, Brussels, CEN, 2000.
- European Council of Health Ministers, Combating stress and depression related problems, Brussels, Council Conclusions, 15 November, 2001.
- European Foundation, Paoli, P., Merllié, D., *Third European Survey on Working Conditions*, Dublin, European Foundation, 2001.
- European Round Table of Industrialists, ERT position on corporate social responsibility, 20 November, 2001.
- Folkow, B., "Mental Stress and its Importance for Cardiovascular Disorders; Physiological Aspects, 'from-mice-to-man'", *Scand Cardiovasc J*, 35:165-172, 2001.
- ILO, Mental Health in the Workplace, Geneva, International Labour Office, 2000.
- Levi, L and I, Guidance on Work-Related Stress. Spice of Life, or Kiss of Death?, Luxembourg, Office for Official Publications of the European Communities, 2000.
- OECD, Corporate Social Responsibility: Partners for Progress, Paris, Author, 2001.
- WHO Executive Board, *Strengthening mental health*, Resolution EB109.R8, 17 January, 2002.
- World Health Organization, World Health Report 2001, Geneva, World Health Organization, 2001.
- World Health Organization, *Mental Health in Europe*, Copenhagen, Author, 2001.