

MSD, stress : expanding discretion

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Simultaneous developments

In France, as in most European countries, stress is very much on the agenda of social partner debates and prevention practitioner interchanges. Survey after survey confirms that symptoms normally associated with stress are on the rise among workers, even though no specific work-related illness has yet been legally recognized. At the same time, musculoskeletal disorders have exploded : in France, they now account for 70% of recognized work-related illnesses, and have risen tenfold over the past ten years. Behind the bald figures, the ANACT network's workplace interventions have uncovered evidence of physical problems due to peri-articular disorders and physical or psychological disorders usually associated with stress.

The common culprit : work intensification

What both the spread of stress and the onset of MSD have in common is work intensification. In 1995, an epidemiological survey commissioned by the ANACT demonstrated the link between MSD and forms of "just-in-time" working raising employee "organizational dependence" levels. The recent surveys by the Dublin Foundation¹ and DARES² in France also confirm a sharp rise in time pressures and "imperative" deadlines for operators. In the French context of an across-the-board reduction of working time, "densification of work" has taken hold, especially when reduced working time has led to cutting down on breaks, doing away with the "down time" which aids recovery, and time to work out problems as a group. Studies are on-going to assess the health impacts of these radical changes in the organization of working time.

Similar explanatory models mean rethinking prevention

Scientific research has already demonstrated the physiological links between endocrine system activity triggered by stress and the onset of peri-articular disorders³, so this article will focus more on the mechanisms and similar work contexts which lead to the development of a stress disorder or MSD. The evidence suggests that we need to radically rethink how we see workplace health and expand the scope of prevention. Analysis of both MSD and stress disorders show the central importance of work

organization. Even more than risk factors, work organization "determines" the characteristics of work situations and may potentiate pathogenic effects. So prevention needs to look towards wider spheres than the standard areas of health protection.

The explanatory models for both MSD and stress-related disorders are necessarily complex and demonstrate the multifactorial nature of the risk factors. This sets them apart from other diseases for which we now possess simple, more monocausal schemas of identification and prevention. So, unlike the so-called "traditional" risks, there is no systematic link between the risk factors and the onset of MSD or stress-related disorders. For example, a short-cycle, repetitive activity does not constitute a pathogenic situation per se. Likewise, a customer-facing relationship with a highly-demanding customer base will not produce stress-related disorders in every case. In both these examples, the individual's health can be preserved provided they can draw sufficient resources from their work organization and their own potentials to withstand the stresses : relations with work colleagues, opportunities for mutual self-help and cooperation, time to deal with unforeseen circumstances, predictive planning, etc.

The fact is that each pathogenic situation is the result of a singular combination of multiple personal and collective, material and psychosocial factors bound up with the practical way work is organized. The relationship between these factors and illnesses is a probabilistic one. So, the complexity of the explanatory models means adapting the preventive measures. What prevention practitioners have to do is to help the firm understand in each specific situation what are the stresses experienced by its employees. To act on a single causal factor based on a one-size-fits-all perception of work situations is invariably to court failure (cf., multi-skilling, job re-design, for example).

The prominence of so-called "psychosocial" factors in work content which are also causal for MSD are also found in the mechanisms of stress-related disorders. Recent European studies on each of these processes point to the proximity, if not the similarity, of the causal factors⁴. This requires a reality check on workers' experiences at an earlier stage of preventive measures, a focus on their perception of the stressors in their work. This analysis involves providing significant help to workers' self-expression, and proactive listening to what they say. It also means

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¹ P. Paoli and D. Merlié, *Ten years of working conditions in the European Union*, Dublin, European Foundation for the Improvement of Living and Working Conditions, 2000.

² "L'organisation du travail : résultat des enquêtes conditions de travail" (work organization : findings of the working conditions surveys), in *Dossier de la DARES*, 4/2000, Ministère de l'Emploi et de la Solidarité, Documentation Française.

³ Cf. in particular the work of the INRS and the contribution of psychoneuroimmunology.

⁴ Cf. Prof. P. Buckle and Prof. J. Davereux's report on MSD for the Bilbao Agency in 2000, and Prof. Cox's report on stress.

encouraging workers to take part in analysing their work, understanding how stresses work, and, finally, searching out and implementing solutions.

Concerted preventive measures can then be implemented on the basis of established conclusions. While they can be expected to have effects on the employee's work situation, preventive measures must be wider in scope, and not restricted to remedial measures applied to the job or the individual (in particular, stress management, or learning correct work motions). As well as job- and work environment-specific measures, solutions must be focused much more on the work process and product design sides, but also on skills development for employees and management, establishing properly controlled multi-skilling, the organization of working time, the organization of workforces to permit mutual self-help, improving work relations between individuals and departments. In other words, prevention means the firm and its advisers acting on several levels – from individual jobs to industrial strategies – which demands joined-up action across all company departments.

Finally, there is nothing set in stone about prevention of the disorders discussed. Ongoing changes in the company, its strategies and organization upset the delicate equilibriums developed by workers to withstand stresses. The clear issue for management is to develop monitoring and forward planning capabilities, such as by early complaint collection, but also by safeguarding workers from the "vicious circles"⁵ identified in the diagnosis phases.

⁵ Cf. F. Bourgeois et al., *TMS et travail, quand la santé interroge l'organisation*, ANACT, 2000. See also : www.anact.fr/sante/tms

⁶ In particular work psychodynamics.

⁷ Karaseck, Siegrist, etc.

Limiting discretion : the common denominator of work situations

When it comes to MSD, the ANACT network, bringing work in various fields to bear⁶, has shown that there are three dimensions to work motions : a biomechanical dimension (movements and their visible characteristics : force, angulation, etc.), a cognitive dimension (the movement is the result of a learning strategy, ...), and a psychological dimension (the meaningfulness of the movement). So, the individual's movement uses creativity to effect production by managing multiple imponderables. If the conditions of production (impossible to predict incidents, regulate one's activity, ...) result in a movement in which the simultaneous requirements of speed and quality can no longer be combined, the movement will be more physically stressed (more forceful, quicker, ...), and the work will become a source of dissatisfaction. The backlash of the distress associated with this now-meaningless work may be reflected in muscle strain and somatization disorders.

Likewise, most explanatory models for stress⁷ demonstrate mechanisms akin to those described for MSD onset : a mismatch between the systematic stresses experienced by the employee and the assessment of how they can be avoided, conflict between the employees' expectations and the actual or perceived reduced potentials offered by the organization, or again, limited individual work autonomy in conflict with the perceived level of demands.

To this extent, both MSD and stress-related disorders arise out of work situations which limit the worker's discretion. They increase the work stressors, sap creativity, and so stop the individual seeing a point to the work, which is a precondition for their mental balance. Expanding workers' discretion, therefore, becomes a key prevention priority : not just to reduce the physical and psychological stressors, but also as a way of recognizing the individual's creativity at work.

Prevention : an issue for social dialogue

The issue of the "discretion" which workers are allowed in their work activity raises questions about all aspects of workplace health. It means prevention practitioners getting involved in work organization to develop the right conditions for individuals to bring their physical and experiential resources to bear. Clearly, it is an issue that goes beyond the narrow framework of prevention to engage all those involved in work organization and industrial bargaining. ■



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