

STRATEGIES FOR HEALTH

AN ANTHOLOGY

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WORKPLACE HEALTH – INFLUENCES AND INTERVENTIONS

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Introduction

Adults spend about 40% of their waking hours at work. The workplace is an important setting both in affecting people's health and as an environment in which to promote health. Health in working life is not a technical, value-free process, but rather one influenced by the ideologies, beliefs and values of key actors, such as officials, workers and unions, employers, corporations and managers, experts and others (Levenstein & Woodings, 1997). Indeed, one of the defining characteristics of the workplace setting is that it brings together a variety of groups and individuals who have different agendas and priorities with regard to work and health (Naidoo & Wills, 2000). Hence, the relationship between work and health may be viewed in different ways by different actors; a conflict of interest may arise between the actors with regard to what comes first, health or productivity.

This text begins with a look at key concepts, theories and models to explain the relationship between health and work. This is followed by a discussion of important empirical findings and research concerning strategies to improve workplace health.

Workplace health influences

Workplace health may be considered an issue for the employee and/or for the organisation and management. Numerous studies have shown strong associations between physical, organisational and psycho-social working conditions and poor health and disease. Occupational health has in particular focused on toxic and physical risk factors at work and their impact on worker health. Reorganisations, down-sizing and new management roles in recent years have shown that organisational aspects and leadership are also important for health.

Occupational health researchers have studied the complex reality of workplace health with the help of work stress models which emphasise some core

factors of importance to explain job-related health and disease. The job demand-control-social support model by Karasek and Theorell (1990) has gained considerable support in empirical studies on associations between job strain (based on a combination of high demands and low decision latitude at work) and cardiovascular disease and stroke, musculoskeletal disorders, self-rated health, and sick leave. This model puts its emphasis on distinct characteristics of the workplace from an organisational perspective and does not consider interaction aspects between the individual coping abilities, socio-economic context and work characteristics.

A more recent model, the effort-reward imbalance model, emphasises both the effort and the reward structure of work (Marmot *et al.*, 1999). The model is based on the assumption that there is a reciprocal relationship between efforts and rewards at work. Health-adverse and health-promoting psychosocial work environments are defined by the interaction between a person's cognitions, emotions, and behaviours and his or her social environment (Siegrist *et al.*, 2004). Imbalance between efforts, represented by job demands and/or obligations on the employee, and rewards, as money, esteem and job security/career opportunities, may cause sustained stress reactions. It is further assumed that this process will be amplified by a worker's overcommitment, meaning excessive work-related commitment and a high need for approval. Highly overcommitted workers will experience more strain reactions to an imbalance between effort and reward (Siegrist, 1996).

Empirical studies have shown associations between cardiovascular disease, increased smoking and alcohol intake, psychosomatic health symptoms, and poor job-related well-being (van Vegchel *et al.*, 2005). Ongoing research in the Strategies for Health arena shows that organisational conditions for learning and competence development at the workplace are also associated with perceived effort-reward imbalances and with overcommitment (Ekberg, 2006) and that leadership also affects the effort-reward imbalance (Barajas & Ekberg, 2006). Employees on long-term sick leave due to stress-related mental disorders have higher overcommitment compared to employees on long-term sick leave due to musculoskeletal disorders and compared to healthy employees (Ekberg & Strindlund, 2006).

The reciprocity perspective between the individual and the workplace is also a core feature in research on organisational justice. Organisational justice is a complex concept, comprising the aspects of distributional, procedural and interactional justice. These factors have been studied separately and in combination with regard to work performance, job satisfaction, psychosomatic health, self-rated health and sick leave (Schmitt *et al.* 1999, Väänänen *et al.* 2004). Workplaces with higher levels of organisational justice may promote a mediating effect on workers' occupational strains and could therefore contribute to employee health (Elovainio *et al.*, 2002). In an ongoing study in the Strategies for

Health arena, a high degree of perceived organisational justice has been shown to be associated with better self-rated health and lower levels of burnout (Liljegrén & Ekberg, 2006).

Theories of reciprocity between the employee and the employer are related to the construct of a psychological contract. The term “psychological contract” is used to refer to a set of beliefs regarding what employees are to give and receive from their employer (Roehling *et al.*, 2001). The present trends of globalization, restructuring and downsizing in working life may invalidate the traditional contract of long-term security in return for productivity and loyalty. Long-term reciprocal contracts are generally not only based on the exchange of pay for performance, but also on psychosocial elements such as loyalty and support (Morrison & Robinson, 1997). Rapid organisational changes may breach the contract, leading to feelings of violation and offence.

In Sweden, sick leave increased dramatically during the late 1990s and the beginning of the 2000s. Occupational groups who have previously been more or less protected from occupational disorders, including middle managers and professionals, now more commonly suffer from stress-related and psychosomatic disorders and burnout syndromes. This increase in sick leave may partly be due to the extensive labour market reorganisations that have taken place in Sweden and many other developed countries during the last decade. Far-reaching and rapid changes increase the risks of workers’ loss of control, participation and social support, and also tend to make work roles less distinct (Thornhill & Saunders, 1998).

Promoting workplace health

Interventions to improve employee health and safety may, according to Murphy and Sauter (2004), be categorised into four levels: (1) legislative/policy (e.g. regulations permitting mobility from sick leave at one workplace to another job); (2) employer/organisation (e.g. organisational culture, flexibility in work schedules, healthy work organisations, and psychological contracts); (3) job/task (e.g. participation in decision making and job enrichment); and (4) individual/job interface (e.g. stress management). This taxonomy underscores the need to approach health development and return-to-work issues in a broad and system-oriented manner.

Individual/job and job/task strategies

The main goal for any organisation, public or private, is to produce services or products to attain predetermined production goals. Most employers do believe that a healthy workforce is compatible with improved performance; it is there-

fore, from an organisational perspective, worth aiming at good health and work capacity among the employees. However, employee health tends to be viewed as an individual responsibility. Workplace health promotion often focuses on lifestyle interventions. Still, unless the organisational context is also considered and modified, such strategies are likely to have a limited effect (Naidoo & Wills, 2000).

Numerous studies have shown that participation and control are among the most pertinent health promoting factors in human life. The concept of control cannot be restricted to the job task only, rather labour market conditions and employment relations should also be included within the concept, as they may influence both the actions and health of individuals at the workplace (Aronsson *et al.*, 2002). Higher worker control within the context of work organisations may be considered a way to reduce stress and job insecurity (Karasek & Theorell, 1990).

Job insecurity is a major risk factor for worker health and well-being, with stress having been shown to limit innovativeness in organisations (Lämsäsalmi & Kivimäki, 1999). Job insecurity reflects the degree to which employees perceive dimensions of their job as threatened and feel powerless to do something about it (Ashford, 1989). However, job insecurity may also appear in seemingly safe employment conditions. The individual's own evaluation of the situation as threatening is, according to Lazarus and Folkman (1984), the determinant for feelings of job insecurity. Performance appraisal processes may, among other factors, be influenced by a worker's experience of control and empowerment. Kivimäki *et al.* (2003) showed for example that those who were still employed after down-sizing are at higher risk for deterioration of health, compared to those who left and found subsequent reemployment. As shown by Wilson (1991), participation in certain situations where worker empowerment is emphasised counteracts fear of changes in workers. Also, the opportunity for employees to participate in their work setting is related to individual development, health, and well-being. However, the concept of participation can be problematic, and there are many obstacles to its application and numerous reasons why it fails to be widely disseminated (Heller *et al.*, 1998; Neuman, 1989).

Work organisation interventions may involve job design and changes in organisational practices and human resource (HR) and social policies. Changes may affect individual level interventions involving the interface between the employees and the work process. Determinants of sickness and poor health may lie both in the environment and in the worker, and also in the dynamic interface between the two. Interventions targeting either organisational changes or individual changes neglect the importance of dynamics and interaction in this interface (Murphy & Sauter, 2004). In this context, health is not viewed as a steady state condition, but rather as developing and reacting within a socio-interactional sphere. Social exchange theories suggest that people strive for re-

ciprocity in their interpersonal and organisational relationships (Leiter & Scahufeli, 1996). These theories underscore the need for mutual interactions between, for instance, management and employees, or between the employee on sick leave and stakeholders including the workplace, health care providers, and social insurance officers. Return to work must therefore address issues of communication, competence development, social support, trust, and the values that essentially comprise organisational competence and culture. Key factors to a positive health development may include innovative solutions of infrastructures for health management within and between organisations. These infrastructures should facilitate access to knowledge, promote exchange of experiences, encourage competence development and effect shared resources in terms of human resources and work. Key barriers to positive health development in a workplace include borders limiting communication and dialogue between organisations (Friesen *et al.*, 2001), as well as barriers established by regulations preventing worker mobility.

Employer/organisational strategies

Several studies have shown that the attitude of the management is a significant factor in a worker's potential for a return to work after sickness absence (Krause *et al.*, 2001). Supervisors, however, often experience a conflict of interest between their responsibility for production and their responsibility for staff well-being when an employee goes on sick leave, and they lack training and competence in these issues (Barajas *et al.*, 2002; Strindlund, 2002). The standards and attitudes of the organisation to health and work capacity seem to be important, both in the attitudes of supervisors and in the authority vested in first line managers to work with preventive and rehabilitation measures to promote worker health (Eakin, 1992). In practice, variations occur in how supervisors define their responsibilities and how they are able to exercise this, leading to wide variations in how they work to promote a return to work for sick-listed workers.

In many studies, active participation by the sick-listed person's supervisor is said to be a particularly important factor to workforce health. The attitude of the management is therefore significant and influences the potential to return to work from sick leave. A Dutch study of employees with lumbar problems showed a 21% lower return to work in employees whose sick status was not supported by their supervisors (Krause *et al.*, 2001). These supervisors, however, often seem to lack the support of more senior managers in working with issues of ill health and rehabilitation.

Supervisors frequently experience a lack of clarity about their responsibilities to assist sick-listed workers to return to work. They experience a paucity of support and authority. This lack of guidance leads to personal interpretations of

how health and sickness absence should be dealt with, in what respects managers feel themselves responsible for adapting the workplace to a sick-listed worker, and in what respects others are responsible for this task. It might simply be a case of the extent to which an organisation gives a supervisor a mandate to work with these issues. Uncertainty leads to avoidance of responsibility, or attempts to shift it to others. Middle managers do not know how to carry out workplace adaptation and therefore need the help and support of, for instance, occupational health services (Baril *et al.*, 2003). Studies that involved teaching middle managers or supervisors about pain and how workplace attitudes promote a return to work have shown that such interventions do, in fact, lead to greater returns to work and to more adaptations of workplaces (Haldorsen *et al.*, 1997). The changes that might be required at workplaces to enable the sick-listed person to return to work thus involve a learning process for everyone involved.

Workplace involvement in return-to-work interventions for those on sick leave is more effective than a workplace merely financing or supporting medical activities to treat the sick-listed worker (Ekberg & Wildhagen, 1996, Loisel *et al.*, 1997; Loisel *et al.*, 2002; Bernacki *et al.*, 2000; Krause *et al.*, 2001). Bernacki *et al.* (2000) showed how, over time, organisational learning has developed through health management programmes in some workplaces, because of the competence interchange between leadership and professionals involved in the rehabilitation processes. Return-to-work interventions following sick leave may hence be considered a learning process over time for not only the individual but also for the organisation, as new competence is developed and attitudes are altered. To facilitate such learning processes, development of health management knowledge and infrastructures at the workplace for supporting innovative “health learning” is an important issue in developing new research approaches. The importance of management and the workplace to both promote the willingness and ability of the individual to return to work was evident from a study of people on long-term sick leave in public services (Strindlund & Ekberg, 2004). Forty per cent of those on long-term sick leave said in this study that they could return to work if the situation at the workplace changed.

A key issue for return to work is time elapsed before intervention takes place. According to Wynne and McAnaney (2004), 80% of those who are absent for six weeks or more require some assistance from their workplace in order to return to work. The probability of returning to work for those who are absent between three and six months is reduced to less than 50% and to 20% for those on sick leave more than 12 months.

If an employee’s poor health or disease is viewed as being caused by non-work-related factors, some supervisors say that they are not responsible for helping to improve the employee’s chances of returning to work. In such cases, there is probably a lack of legitimacy from upper management for supervisors

working with the issue, despite the fact that, in Sweden at least, responsibility for rehabilitation applies “regardless of how work capacity has come to be reduced” (SOU, 1990). The type of ill health experienced by workers also seems to influence the attitudes of the supervisor. Mental and psychosomatic conditions are deemed harder to deal with than physical symptoms, and these problems are largely ascribed to the individual him/herself, or his/her life situation, rather than to the workplace (Strindlund, 2002).

The longer the time that has elapsed since a sick-listed worker fell ill or took sick leave, the more important psychosocial and work-related factors appear to be. However, research into the significance of these factors for a return to work is still extremely limited. The design of the rehabilitation process affects both the motivation of the participants and the results achieved (Baril *et al*, 2003).

Many studies underline the importance of the participatory nature of the rehabilitation process. In a pilot study by Medin and colleagues (2003) workers suffering pain were on sick leave for up to eight years. More than half managed to enter work-related activities after six months’ participation in a problem-solving support group. One important reason for this success was the participatory and targeted design of the rehabilitation method. The participants’ overall goal was to return to work. Each participant was to personally state how this goal was to be achieved, and then work on achieving this goal within the framework of the rehabilitation process.

Other workplace factors impact sick-listed workers’ ability to return to their jobs, including support from co-workers. Baril and colleagues (2003) describe how perceived unfair distribution of the workload between colleagues can occur if a person cannot carry out all the usual tasks because of his or her functional impairment. In one example in which it was possible to solve this problem, the group of workers was allowed to exercise influence over which tasks were to be included in the work adaptation, as well as how various tasks were to be assigned among them.

Krause *et al.* (2001) report that people on sickness absence who experienced high demands at work before the sickness absence had lower levels of return to work in both the acute and sub-acute or chronic phases of their illnesses, compared to those who had low demands at work. Low levels of worker control at work, combined with high demands, reduced return to work by a factor of two during the sub-acute or chronic phase (but not during the acute phase). A low level of support from one’s supervisor also reduced return to work. Interestingly, Krause’s studies and others show that a worker’s previous experience with back problems facilitated a return to work. This can be interpreted to mean that previous experience with health problems aids an individual’s ability to deal with new symptoms – the individual may have learned to deal with the fear of pain and also to minimise avoidant behaviour in connection with activity (Linton, 2001).

Several studies demonstrate that work environment factors and standards, and values and priorities of management are important to the success of rehabilitation measures. The literature, however, describes few examples of how work-oriented rehabilitation can be successfully implemented in the workplace. A worker's return to the job that generated one's ill health is particularly difficult for people who are on sick leave due to stress-related mental problems or who are suffering from burnout (Astvik *et al.*, 2006). One obstacle to the application of the regulations to promote worker health is thus the current general interpretation of the "work-line strategy" (see Söderberg's chapter in this anthology) to aim for return to the sick-listed workers previous workplaces. One obstacle to the application of the regulations to promote worker health is thus the current general tendency among sick-listed workers to return to their previous workplaces.

Legislative and policy strategies

The role of the workplace as an arena for active health promotion and for prevention of disease has become increasingly recognised, not only in Swedish legislation, but also in international legislation and through policy documents from the European Union, the International Labour Organization, and the World Health Organisation, amongst others.

Regulations to improve workplace environments were introduced by the Work Environment Act, enacted in Sweden in 1991. These regulations extended the responsibilities of the employer to include a responsibility for rehabilitative environments at the workplace. Work conditions were to be adapted to the capacity of the individual employee, and the employee was given the right to influence his/her own work situation and participate in changes and development work, while the employee in turn was obliged to participate in measures designed to improve the work environment.

The National Insurance Act introduced the term "work-line strategy" into Swedish social insurance for the first time in 1992. The term referred to rehabilitation measures that were important in facilitating a return to work for people who were on long-term sickness absences or who had a temporary or permanent work disability pension. The overall objective of the work-line strategy is to maintain the workforce, i.e. as many people as possible should be able to support themselves by working. The work-line strategy also means that the public sector should prioritise active measures to bring people back to work.

The emphasis in the Swedish rehabilitation process was shifted to the workplace through the transfer of greater responsibility for workplace health to the employer. This responsibility included carrying out a rehabilitation plan and undertaking rehabilitation measures at, or in association with, the workplace, with the intention of providing work for the sick-listed employee. The Social Insur-

ance Office was given the role of coordinating the rehabilitation process between the different actors involved.

A general employer's requirement was also introduced on 1 January 1992 that obliged the employer to pay sick pay for the first two weeks of each worker's sickness absence. The purpose of this was to increase the employer's responsibility for the health of employees and create incentives for employers to initiate improvements in the work environment that would promote the health of employees.

The employer's responsibility for the rehabilitation of employees is, however, unclear, leaving wide scope for interpretation. In practice, therefore, public sector authorities have increasingly assumed the day-to-day responsibility for rehabilitation. This means, in turn, that many rehabilitation measures are carried out without workplace conditions being taken into account and without the employer becoming actively involved. The rehabilitation measures thus risk becoming largely focused on the individual on sick leave, rather than on the interaction between the individual worker and her or his workplace.

Return-to-work has become increasingly popular as a concept and a practice for promoting work capacity among employees on sick leave. According to MacEachen *et al.* (2006), return-to-work is characterised by a worker's early return to the workplace, often with modified capacity, even while the worker is still undergoing treatment. This approach is largely incorporated in the Swedish legislation and in current attempts to support part-time sick leave as a first step back to work. Return-to-work has, as a consequence, become an issue for the workplace, not only in terms of health and disease management, but also from the perspectives of law and economy.

Lack of interchange within and between organisations and an essentially "locked" labour market restrains workforce opportunities for mobility. These same factors also impact return to work or mobility into other jobs for those on sick leave (Aronsson *et al.*, 2000; Liljegren & Ekberg, 2006).

Systematic reviews of the literature on workplace-based return-to-work interventions (Franché *et al.*, 2005; MacEachen *et al.*, 2006) provide strong evidence that work disability duration is significantly reduced by work accommodation offers and regular contact between the worker's health care provider and the workplace. There is moderate evidence that disability duration is reduced by interventions which include early contact between the employee and the workplace, ergonomic work site visits (for those workers who suffer from musculoskeletal disorders) and presence of a coordinator or case manager coordinating the return-to-work process. There is also some evidence that these interventions reduce costs that are associated with the duration of work disability periods. The qualitative studies also show that central to successful return-to-work arrangements are good will and trust. There are often social and communication

barriers to return to work. Intermediary actors, such as health care and the social insurance professionals, have important roles in facilitating this process.

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