

## RETURN TO WORK AFTER MSD-RELATED SICK LEAVE IN THE CONTEXT OF PSYCHOSOCIAL RISKS AT WORK

### Musculoskeletal disorders and psychosocial risk factors — an introduction to the topic



Returning and continuing to work with musculoskeletal disorders (MSDs) is a crucial topic in all European countries (with a degree of variability among countries), because MSDs are one of the most frequently reported health problems worldwide (WHO, 2019).

The European Working Conditions Survey (EWCS; see Eurofound, 2015) stated that, in 2015, 50 % of all European workers reported one or more musculoskeletal problems, backache being the most common problem, followed by upper limb problems (neck and shoulders) and lower limb problems (hips, knees, ankles).

Among work-related health problems work-related MSDs are most prominent: in the 2013 Labour Force Survey 60 % of all respondents identified musculoskeletal problems as the most serious health problems (Eurostat, 2013). A large proportion of working days are lost every year because of MSDs; in 2015, for example, 53 % of workers with MSDs reported that they had been on sick leave the year before (EU-OSHA, 2019a).

The prevalence of MSDs has remained constantly high in recent years, although there have been major efforts to reduce the risks for MSDs. As people are living and working longer, the prevalence and impact of musculoskeletal conditions are predicted to increase further globally.

Various factors may contribute to MSDs, such as physical, organisational, psychosocial, sociodemographic and individual factors (EU-OSHA, 2019a). Psychosocial risks, especially in combination with physical risks, may cause or aggravate MSDs.

In the fight against MSDs ergonomic conditions have greatly improved but not work organisation or the psychosocial working environment.

In this article, we discuss MSDs with an emphasis on the context of psychosocial risk factors at work and focus in particular on returning to work with MSDs.

### What are MSDs and what are work-related MSDs?

**MSD** is a generic term used to describe pain and discomfort in the muscles of the body (EU-OSHA, 2020a: 14). Musculoskeletal conditions are a diverse group of conditions that affect the musculoskeletal system and the locomotor system, that is, muscles, bones, joints and associated tissues such as tendons and ligaments, as listed in the International Classification of Diseases (M00-M99). They comprise more than 150 diagnoses. Musculoskeletal conditions are typically characterised by pain (often persistent) and limitations in mobility, dexterity and functional ability, reducing people's ability to work and participate in social roles with associated impacts on mental wellbeing. At a broader level they affect the prosperity of communities (WHO, 2019).

Some MSDs appear suddenly (e.g. after an acute trauma resulting from an accident); most of them, however, develop gradually as a result of a long or repeated exposure (they are cumulative). MSDs can be of short duration or lifelong (chronic).

The term **work-related MSDs** refers to health problems affecting the muscles, tendons, ligaments, cartilage, vascular system, nerves or other soft tissues and joints of the musculoskeletal system, which are caused or aggravated primarily by work itself; they can affect the upper limb extremities, the neck and shoulders, the lower back area and the lower limbs. Work-related MSDs are mostly cumulative disorders as a result of repeated long-term exposure to work hazards.

## Facts and figures on MSDs and the negative impacts of work-related MSDs

Summing up the data from various sources <sup>(1)</sup>, work-related MSDs are key issues in all EU Member States. Both incidence and prevalence rates <sup>(2)</sup> have remained high at the EU level over the years. MSDs have **negative consequences** at different 'levels': at the micro-level for the individual worker, at the meso-level for companies and enterprises and at the macro-level for the public health system, the economy and society in general. MSDs can have short- and long-term impacts; they affect the individual's health, quality of life, quality of work, productivity and economic status as well as the nation's economy.



For labour inspections, insurance companies, occupational safety and health (OSH) experts and companies, **incidence and prevalence rates of occupational diseases** (diseases legally certified as occupational diseases) are key indicator data for legally required interventions and potential compensation for workers. However, at the EU level the data cannot be compared very well. In some countries MSDs constitute a high proportion of occupational diseases (Eumusc, 2011), in others the percentage is much lower, because MSDs are not recognised as occupational diseases in all EU countries. So, for example, in 2005 MSDs accounted for 5 % of all occupational diseases in Germany, for 33.5 % in Sweden and 89.35 % in Spain (Eurogip, 2007).

**MSDs and absence from work.** More than half of workers with MSDs reported taking time off work in a 12-month period (EU-OSHA, 2019a). In the EU, 26 % of workers with chronic MSDs and other health problems report more than 8 days of absence per year (but only 7 % of workers with no basic health problems) (Eurostat, 2014). Long absences from work endanger a person's long-term employability. High sick leave rates result in increased costs due to direct or indirect sick leave payments <sup>(3)</sup>.

**Presenteeism <sup>(4)</sup>.** The percentage of workers with MSDs that report having worked between 4 and 20 working days while they were sick is much higher than that among workers with any other health problems (Eurofound, 2015). Presenteeism can lead to dissatisfaction with work, conflict and high rates of sick leave.

**Early retirement.** One third of workers with MSDs (combined with other health problems) think that they will not be able to stay in their job up to the age of 60 years (Eurofound, 2015). The risk of disability and early retirement is higher in people suffering from MSDs.

<sup>(1)</sup> The main sources of information are surveys such as the European Working Conditions Survey (EWCS), the Labour Force Survey – ad-hoc modules (LFS), the European Survey of Enterprises and Emerging Risks (ESENER), the European Health Interview Survey (EHIS) and administrative data obtained from European Statistics on Accidents at Work (ESAW), the European Health for All Database or the World Health Organization European Mortality Database.

<sup>(2)</sup> The incidence rate considers the number of new cases of MSDs within a certain population and period, and the prevalence rate considers the total number of MSDs suffered by people in the last 12 months.

<sup>(3)</sup> Direct sick leave costs are where companies pay workers' wages during sick leave; indirect sick leave costs are where companies pay social insurance, and the social insurance companies in turn pay sick leave wages and pay for treatment.

<sup>(4)</sup> Presenteeism describes the phenomenon of working while feeling or being ill.

**Impact on the national economy.** An estimated 1-2 % of gross domestic product is lost as a result of MSDs (Bevan, 2015). MSDs incur additional costs for medicine and treatment, rehabilitation, compensation if the MSD was work induced, disability and early retirement pensions, and so on.

Thus, preventing MSDs and supporting a good return-to-work process are essential not only from a human and ethical point of view but also for economic reasons!

## Psychosocial risk factors at work in the context of MSDs

MSDs are associated with several categories of risks: individual and sociodemographic factors and work-related risks. Occupational exposure, that is, risks encountered at work, contribute to MSDs, either independently or in combination.

Here is a brief overview of such factors:

- **physical (biomechanical):** such as high physical demands, highly repetitive work, use of considerable force, vibration, excessive cold or heat, awkward postures, prolonged work tasks, prolonged sitting or standing, and many more;
- **organisational** (the way work is organised affects how burdensome physical work tasks are): the number of consecutive working hours, frequency of breaks, poor working time arrangements, working under time pressure, lack of time to recover, inflexibility of procedures, lack of self-determination, lack of resources to carry out high-quality work, monotonous tasks and lack of career development;
- **psychosocial:** such as high job demands, low level of social support either from line managers or colleagues, low level of job control, high work intensity, work-life conflicts, heavy mental load, lack of decision-making authority, lack of recognition for work done, conflict of values at work, conflict on the quality of work, lack of organisational justice (e.g. uneven distribution of work), job insecurity, poor social environment, lack of interpersonal relationships at work or social support, discrimination, harassment and bullying, all of which can cause stress responses in workers and thus lead to psychological and physical harm.

Psychosocial risks are not categorised uniformly in studies and publications, but most approaches cover risks related to the main areas of social support, job control, decision-making authority and acknowledgement.



As a result of the increased use of new technologies (i.e. the digitalisation of work) work-related risk patterns have changed and thus have to be taken in account in risk assessments and prevention too. As work has become increasingly digitalised, more people work from home or remotely while travelling or getting jobs through digital platforms. This gives workers more flexibility, but at the same time it shifts the boundaries between work and private life. It accelerates work procedures and thus increases time pressure; it leads to complete new forms of personal communication with line managers, supervisors and colleagues (EU-OSHA, 2020b)

Work-related risk factors are unequally distributed across the various sectors and occupational groups depending on their nature and ergonomic characteristics but also on the psychosocial characteristics of the work. Specific groups such as women, migrant workers or LGBTI (lesbian, gay, bisexual, transgender and intersex) workers are more susceptible to MSDs, as data presented in EU-OSHA's

report *Workforce diversity and musculoskeletal disorders: review of facts and figures and examples* (EU-OSHA, 2020c) prove. The reasons are manifold, such as generally poorer working conditions, lower level jobs and higher levels of exposure to harassment, threats, discrimination and sometimes to environmental hazards (in 3-D jobs, i.e. dirty, dangerous and demanding). One important lesson learned from the studies commissioned by the Swedish Work Environment Authority (SWEA) is that the differences in ill health between women and men do not have biological causes, but they are brought about by the work being organised differently and work resources being distributed unevenly (SWEA, 2020).

It is necessary to understand that MSDs can be caused or aggravated by the psychosocial risk factors mentioned above, especially when it comes to prevention and return to work. Therefore, interventions to improve and reduce psychosocial stress factors may have a major impact on recovery from MSDs and a sustainable return to work.

## How are psychosocial risks and MSDs connected?

Currently accepted models of MSDs are based on the biopsychosocial model <sup>(5)</sup> developed by Engel (1977) and since adapted (e.g. by Hauke et al., 2011). Workers face psychosocial risks at work and outside work. The individual stress response or reaction to risk factors is seen as a key factor in the link between work-related risk factors (which can be physical, psychosocial or organisational) and disorders. This underlines why interventions must take place at occupational and individual level or in combination, as will be described below.

The following findings from a report by EU-OSHA (2020b) show how psychosocial risk factors at work and MSDs are connected:

- **Low social support:** a lot of research findings support the relationship between low social support and muscle-related pain in all body regions and specifically pain in the lower back, neck and shoulders.
- **Low level of job control,** which includes a lack of decision-making authority: this has been shown to be directly related to pain in the back, neck, shoulders, wrists, elbows, hips and knees.
- **Poor job satisfaction:** this seems to be particularly associated with pain in the upper extremities and lower back.
- **Work-life conflicts:** several studies have concluded that work-life conflicts are associated with musculoskeletal pain (above all lower back pain).
- **Adverse social behaviour,** such as discrimination, harassment and bullying: these risks seem to be directly associated with MSDs. An indirect relationship through psychological strain was also found.

On behalf of EU-OSHA, a group of experts carried out research to explore whether there was a statistical relationship between the prevalence of MSDs and certain work-related risk factors (EU-OSHA, 2019a). Based on several regression models using data from the sixth wave of the EWCS (2015) the relationship between the different risk factors and MSDs was studied. Positive associations were found between MSDs in the back, lower and upper limbs and verbal abuse, unwanted sexual attention, bullying and unclear work instructions, whereas having a say at work, satisfaction with one's own work, fair treatment at work and being able to take a break when necessary was negatively correlated with upper limb problems, indicating a possible protective effect.

In addition, for those with a chronic MSD, one can say that when people are stressed it is harder for them to ignore their symptoms of pain. There is a close interaction between musculoskeletal pain and the mind (OSHWiki, 2019).

---

<sup>(5)</sup> The biopsychosocial model was developed by G. L. Engel in 1977. It sees health and illness as products of *biological characteristics* (such as genes), *behavioural factors* (such as lifestyle and health beliefs) and *social conditions* (such as cultural influences, family relationships and social support).

## Managing MSDs at the different levels of prevention and return to work

For individuals and organisations alike, it is important to maintain workers' musculoskeletal health throughout their working life and thus ensure that they experience better health, take less sick leave and stay longer in their jobs. Better health and higher quality of life last long beyond the working years. Holistic prevention and good return-to-work procedures help to maintain or restore work ability. They are part of a high and inclusive OSH standard.

The ultimate goal of OSH standards is to provide a workplace that takes action to prevent MSDs and work-related stress, that promotes musculoskeletal health and mental health, that encourages early intervention to address any musculoskeletal problem, that makes reasonable adjustments to enable people to continue working following an MSD and that accommodates effective rehabilitation and return-to-work plans (EU-OSHA, 2021).

This section highlights the importance of prevention of MSDs and return to work after suffering an MSD, especially in the context of psychosocial risk factors, and gives an example of a risk assessment as part of the prevention policy and the basis for return to work.

### Risk assessments as the basis for preventing work-related risk factors for MSDs

EU-wide safety and health regulations set out employers' responsibilities to prevent work-related risks based on regular assessments, which evaluate the risks to the safety and health of workers and must be repeated at regular intervals.

Bearing in mind the obligation to assess all risks to workers safety and health, companies should consider not only (persistent) physical risks at work but also organisational risks, increasingly psychosocial risks and, of course, newly emerging risks due to new work technologies and methods. In some Member States supplementary legislation has been passed to cover psychosocial risks. This has, however, led to a misconception among companies that different risk assessments need to be undertaken. EU-OSHA clearly recommends in several reports that we return to the original concept of assessments and carry out an integrated risk assessment. This implies that risk assessment tools need to be updated to cover the relationship between physical and psychosocial risks. Psychosocial risk factors cannot be assessed by 'measuring work equipment'" they have to be assessed through surveys, interviews with workers and observations in accordance with scientific standards of mapping psychosocial risk factors. But the assessments of physical and psychosocial risks should be linked. For example, an OSH expert could carry out interviews with workers while investigating their workstations. This also means that all OSH experts need to be trained in psychosocial risks. However, often technically oriented safety engineers are quite reluctant to change their evaluation methods. So, what happens is that safety engineers assess ergonomic or technical risks and occupational health physicians or psychologists assess the psychosocial risk factors. Ideally, however, the assessments should be carried out jointly by both working as expert teams to link the different risks together.

There are many risk assessment guides available in Member States, and material is available from EU-level or international organisations, all of which can be used by small companies to do in-house psychosocial risk assessments. It is important to remember that risk assessment should also consider the needs of specific groups, for example young or older workers, female or migrant workers. Assessments that consider the varying aspects of specific groups will enable appropriate and effective measures to be implemented.

### *A practical example of the importance of a holistic approach to risk assessment*

The following example, provided by the author and taken from her own experience, underlines the importance of a holistic approach to risk assessment.

A risk assessment in the surgical department of a hospital revealed the following: many, mainly female, nurses suffered from chronic back pain, as patients were getting heavier. So, two ergonomic patient lifters — for moving heavy patients when necessary — were purchased. Their use was demonstrated and the nursing staff instructed in how to use them. But the nurses' back problems did not diminish over

time; on the contrary, they increased. An assessment carried out by the safety engineer together with the occupational physician then found that the lifters were not being used incorrectly — they were not used at all! In this department time pressure was high because of a high throughput of patients and severe understaffing because of sickness-related absences. Because of the constant understaffing nurses were solely in charge of several patients' rooms and could not fetch help from a colleague when lifting heavy patients. Fetching the lifters from another room also took time. Every time the nurses went to fetch the lifter, the head nurse would put pressure on them to hurry up. The nurses, especially migrant nurses, did not want to argue with the head nurse, who was known to 'punish' rebellious nurses with unfavourable work shifts. So, the nurses would do without the lifter. To sum up, the line manager was not supportive and work demands and time pressure were high. Psychosocial risk factors prolonged the work-related risks for the nurses and even exacerbated their musculoskeletal problems.

## Principles of facilitating return to work with MSDs



**Early interventions** help to avoid long periods of sick leave. Interventions such as interviews, professional support or adjusting the work environment should be undertaken as early as possible, that is, as soon as symptoms are reported (EU-OSHA, 2021). In the example above early intervention (by providing ergonomic lifting devices) took place after the symptoms were recognised, but the psychosocial aspect was completely ignored and the line manager was not supportive, so the early intervention was fruitless. The holistic risk assessment then showed why the early intervention had failed.

**Returning to work after sick leave.** Return-to-work measures aim to facilitate reintegration into work after long-term sick leave. There is no uniform definition of what long-term leave is: in many countries it is 6 weeks, and then return-to-work measures are initiated. They aim to support workers with reduced work capacity and capability, whether they suffer from chronic MSDs, cancer or other health problems. They help them to recover their health and reduce the risks of long-term disabilities, which are often associated with chronic illnesses. The goal of returning to work is for the worker to resume work tasks and the employer to achieve a sustainable retention of workers <sup>(6)</sup>. Some workers may never be 100 % fit again, but, with adequate adjustments at work and by focusing on the workers' capabilities, they may still be able to work until they are due to retire.

Return-to-work processes are regulated differently in the various EU Member States. Many countries provide specific programmes, and the level of support differs considerably from country to country, as pointed out in EU-OSHA's report on the Member States' policies on rehabilitation and return to work (EU-OSHA, 2016). Looking at specific indicators, countries were categorised into four groups. One of the groups stands out for the inclusiveness of the countries' rehabilitation system (all workers are entitled to rehabilitation), its focus on prevention and early intervention, the broad responsibility of the employer in the return-to-work process, the effective coordination of multidisciplinary teams and the case-management approach (this group comprises Austria, Denmark, Finland, Germany, the Netherlands, Norway and Sweden). The rehabilitation of workers is generally supported by an integrated policy framework for the promotion of sustainable work or the prevention of exclusion from the labour market (EU-OSHA, 2016: 4). In Austria, for example, this policy framework was laid down in

<sup>(6)</sup> Workplace retention initiatives aim to keep workers at work by providing support either permanently or for a limited period; ideally, they kick in before long-term sick leave occurs.

the Labour and Health Act (Arbeit- und Gesundheit-Gesetz), passed in 2011 and followed by the Part-Time Reintegration Act (Wiedereingliederungsgesetz) in 2017.

The EU's equal treatment directives set standards to include workers with disabilities, to which workers with chronic MSDs also belong. For example, Article 15 of Council Directive 89/391/EEC stipulates that particularly sensitive risk groups must be protected against the dangers which specifically affect them.

Vocational rehabilitation is part of return-to-work-concepts. Medical, vocational and social rehabilitation is understood as the process of recovering 'optimal physical, sensory, intellectual, psychological and social functional levels' (EU-OSHA, 2016, citing WHO, 2016). Returning to work is a form of rehabilitation — it starts with medical rehabilitation and ends with vocational rehabilitation <sup>(7)</sup>; it requires a joint approach that involves all relevant participants from the healthcare provider to the employer, line manager and worker (EU-OSHA, 2021).

At company level, the proportion of employers implementing company policies supporting employees to return to work after a long-term sickness absence varies considerably across the EU-27 and the United Kingdom. The proportion is highest in the United Kingdom, Sweden, Finland and the Netherlands at over 90 % and lowest in Lithuania at 19 %; the EU average is 73 % (EU-OSHA, 2020: 96).

Before going into detail, return-to-work programmes should focus on three main goals:

- to develop and implement an effective OSH strategy for managing illnesses at work (learning organisations);
- to increase the number of workers who return to work and stay at work after illness and sick leave (sustainability);
- to create positive return-to-work experiences and a healthy, supportive culture for workers.

The following tables provide an overview of facilitators and prerequisites for return-to-work processes for people with MSDs, highlighting especially the psychosocial aspects. Table 1 lists the company's responsibilities and Table 2 the worker's responsibilities.

**Table 1: Relevant aspects for companies to ensure a successful return to work for workers with MSDs**

### 1. Health policy

- Implement an integrated OSH management approach at the top level of the company or organisation, including a supportive holistic health policy, spanning health promotion, prevention and a defined return-to-work policy. The OSH standard stipulates prevention, regular risk assessment and reassessment, intervention when problems are identified and occupational health care.
- Provide a systematic and clearly defined return-to work policy that includes organisational stages and individual return-to-work plans.
- Take a holistic approach that considers workplace risks, including physical, organisational and psychosocial factors/stressors.
- Measure performance and factors that influence performance.

As regards psychosocial risks and MSDs, aspects such as job demands (including psychological pressure), job control, appreciation, social support, organisational fairness, dealing with conflicts and harassment need to be evaluated and addressed in the risk assessments.

With a view to implementing a continuous improvement process, data on MSDs should be collected at company level and all organisational and psychosocial measures taken to prevent MSDs or enable a smooth return to work should be monitored.

<sup>(7)</sup> Germany was quite successful with its MBOR (*medizinisch-beruflich-orientierte Rehabilitation* or medical-vocational oriented rehabilitation).

## 2. Culture promoting health and good communication

- Promote a good communication culture on health and sickness that enables workers to talk freely about their needs with their line manager.
- Create a positive atmosphere and a supportive culture without pressure or sanctions.
- Contact sick workers as early as possible and stay in touch with them regularly to show that help is there if needed.
- Ensure that workers are fully involved in the return-to-work programme and that the practice is widely accepted.

Psychosocial factors can be crucial in achieving a quick return to work, that is, when they constitute an asset rather than a risk, for example providing social support from line managers or colleagues.

It should be easy for workers to report problems. Workers with MSDs should be encouraged to talk about the psychosocial risk factors at work and receive ergonomic, organisational and psychosocial support to ensure a smooth return to work.

## 3. Incentives

- Promote the return-to-work programme as an attractive option and a benefit rather than a punishment.
- Ensure that workers have quick access to workplace-oriented interventions for MSDs and to (external) support ranging from occupational health professionals to coaches, psychologists or psychotherapists, who can help workers to analyse individual stress patterns, enhance their resilience and address their needs.

## 4. Build awareness

- Raise awareness among line managers of the nature and impact of chronic illnesses, their relation to psychosocial issues and how to manage psychosocial risks.
- Show readiness to discuss workers' needs but also point out the legal rights and duties of all parties involved regarding sick leave.
- Make return to work part of the company's health policy and ensure that managers are informed about and trained in how to support staff, which will raise their awareness of the importance of psychosocial risk in people with MSDs.

In the context of MSDs and psychosocial risk factors this also means — as mentioned above — that line managers should understand work-related MSDs and the impact of psychosocial risk factors on MSDs and should discuss these problems with their workers and know how to support them.

## 5. Professional multidisciplinary support (internal and external services)

- Return to work is most successful when the various external health care professionals (such as OSH or counselling services) and the company doctor (if not provided by an external organisation), the human resources (HR) department, line managers and, of course, the workers themselves are all involved.
- Easy access to health care services and a multidisciplinary approach involving medical and non-medical facilitators are important to ensure the workers' smooth reintegration.
- Large companies often provide a multi-skilled integration team and an integration manager who coordinates the team and the reintegration process itself.
- In small and medium-sized enterprises (SMEs) a case manager is often provided by external services (e.g. OSH services or health insurance companies); here too a multidisciplinary approach coordinating input from several experts is essential.



The advantage of external counselling services is that it might be easier for the worker to talk about the inherent problem; the disadvantage is that these services might not fully understand the work situation and cannot intervene in the workplace <sup>(8)</sup>.

- Integration or case managers guide management and the worker through the integration process step by step and coordinate it.

For MSDs that are not monocausal but related to several risk factors, a holistic risk assessment is imperative. In more complex cases, different expertise (ergonomic, psychological, worktime, etc.) and support from medical and non-medical professionals may be needed for the intervention at the workplace. Psychological coaching or psychotherapy can also be part of the vocational rehabilitation. All support efforts should follow a strict procedure and time schedule. Small companies that do not have the necessary expertise in-house, may be supported by counselling services or health insurance companies.

## 6. Social support

- As psychosocial support is vital for the success of returning to work, make sure that the line manager, HR department and colleagues support the worker.

The support of colleagues often depends on how the line manager instructs the team. Support can be of a psychological, social or physical nature. As the case studies of MSDs in this article show, psychosocial help was an important factor in a good return-to-work process in every case.

## 7. Competence building

- Provide regular training for the integration manager and integration team.
- Have external experts standing by ready to offer their expertise.
- Ensure organisational learning through regular process evaluation.
- Regularly update the expert support network, especially if the expertise is not in house; this holds especially true for SME. The quality of interventions and of the entire return-to-work process, strongly depends on the competence of the teams and (internal or external) experts advising the company and worker and guiding them through the process. Learning from the reviews of return-to-work processes helps the organisation to build up competence.

Not surprisingly, a high level of state-of-the-art competence is important for a successful return to work with MSDs, especially with the newly emerging psychosocial risks (e.g. what kind of help does a worker suffering from severe neck problems, working at a visual display terminal, partly from home, and home schooling children need?). To make an intervention truly useful, all aspects need to be understood.

## 8. Workplace adjustments

- Think about the risk factors that are involved and need to be considered or changes that have to be made when a worker with an MSD returns to work.
- For this, ad hoc assessments need to be carried out — usually by OSH experts. They need to cover a wide range of risks, such as physical, organisational and psychosocial factors, and involve the worker and the line manager.

Here are some examples of adjustments that could be relevant for work-related MSDs aggravated by psychosocial stressors:

- Adapt the work equipment (replace it with more ergonomic equipment), but also train the worker in how to use it and give them time to get used to it (remove the pressure of time).
- Change or swap work tasks or at least reduce the duration of the difficult parts of the tasks (e.g. long periods of sitting).

<sup>(8)</sup> In Austria the national return-to-work programme, called fit2work, offers both business and individual counselling. Business counselling is provided to the company to develop and standardise a return-to-work policy and build up know-how within the company on how to set up individual return-to-work plans. Individual counselling is provided to the worker. Often, if the worker does not want their identity to be revealed to the company, no interventions or adjustments at the workplace can be made and only individual measures can be taken.

- Allow the worker to rotate tasks, take over another role or move to a different department in the company, but simultaneously, if necessary, ensure that colleagues are engaged and potential conflicts managed to prevent any further problems.
- Allow flexible working hours; this also ensures that the worker can keep medical appointments.
- Let the worker take breaks when they need to.

### 9. Gradual return to work

- Allow a gradual or partial return to work by increasing the working hours step by step. Commonly, this process will last 3-9 months, and rarely any longer.

For workers with MSDs a gradual return is helpful to check if the adjustments made work, if they can cope with the stressors and if social support at work and from their families helps them to recover and return to work and remain in their jobs. The process makes workers feel as if they are in control, thus reducing their fear and stress.

### 10. The right timing

- The return-to-work process and interventions should take place at the right time, neither too early nor too late; usually this is 6 or 8 weeks after the worker went on sick leave. The longer a worker is absent from work, the lower the chance of a good return to work.

After 6-8 weeks the medical treatment and medical rehabilitation of workers with MSDs should have progressed such that their health should not be endangered when they resume work (at least partially).

### 11. Customise the return-to-work process within a standard procedure

- The return-to-work programme itself follows a standard procedure agreed on by the company (return-to-work policy), but within this standard it is necessary to adjust the measures to the individual's needs and provide a tailor-made return-to-work plan.
- Many companies adopt a kind of 'reintegration agreement' with the worker (often even a formal one).

A standard reintegration procedure should be in place at company level. The procedure starts with how to approach the worker and how early to get in contact with them. It then evaluates the individual situation and assesses the workplace, including developing a reintegration plan that focuses on workplace interventions and supports and encourages individual measures. As the factors that may cause or aggravate work-related MSDs may vary from worker to worker, it is crucial to tailor the workplace interventions (be they psychosocial or ergonomic or both) to the needs of the worker. Sometimes it will be necessary to adjust the pace of the incremental return to work. Last but not least, the way in which the progress of reintegration should be tracked (evaluated) should be defined.

Reintegration also means not focusing on what the worker is not capable of doing but on what they are able to do and how they can develop and recover.

### 12. Reviewing and performance tracking

- Review the individual return-to-work process at regular intervals to see if the measures are fruitful, how the worker is coping and whether adaptations are necessary.
- Evaluate at meta-level: report and document all return-to-work cases. What could be learnt from them, what worked, what had to be changed, which risks aggravated or caused MSDs, how could they be avoided, etc.?
- Performance tracking is vital for evaluating the outcome (lag indicators such as timeliness or sustainability of reintegration) and the interventions that led to a successful return to work (lead indicators such as workplace accommodations or social support).

For a worker with an MSD this means:

- measuring whether the worker with an MSD is safely and sustainably reintegrated in the work process (outcome)
- evaluating the interventions

- ascertaining how the worker perceived the social support provided
- ascertaining how extensive the assessment of psychosocial risks was.

Source: table compiled by the author, based on several EU-OSHA publications on MSDs (EU-OSHA, 2020d, 2021) and her own experience as a return-to-work manager in Austria.

Workers themselves must contribute to the prevention of work-related illnesses and to a smooth return to work, for example by following the OSH regulations.

**Table 2: Relevant aspects for workers to ensure their successful return to work with an MSD**

### 1. OSH standards — rights and duties

- In the same way that companies should provide high OSH standards for risk prevention, early intervention and return to work, workers, too, have to contribute to their wellbeing by complying with OSH standards, complying with safety and health rules, following ergonomic instructions and actively participating in risk assessments. The workers' obligation to cooperate is laid down in the OSH regulations.

For workers with MSDs, this means using the special equipment provided by the company or taking part in psychosocial risk assessments.

### 2. Self-management of health problems

- When workers suffer from pain limiting their work ability (before this pain leads to a long period of sick leave), but also when returning to work after an absence, self-management of pain and other problems and limitations is essential. Obviously, self-management is easier when the company is supportive and allows for some flexibility.

Pain is one of the main factors interfering with work ability: pain results in stress and, vice versa, stress increases pain and thus aggravates MSDs. Self-management can be a combination of avoiding unnecessary strains, taking regular exercise (also at work), using pain-relieving techniques and also learning relaxation skills (EU-OSHA, 2021). Part of the self-management concept is to learn to communicate needs in order to receive support. Often external support is necessary to learn good self-management.

### 3. The trust and will to talk

- Workers must be willing to talk about relevant health problems — to health experts but also to their line manager.
- Diagnoses must not be shared at 'company' level; usually only the occupational health physician or the GP needs to be informed. Here EU-OSHA's *Conversation starters for workplace discussions about musculoskeletal disorders* (2019c) can be a valuable 'icebreaker'.

Workers with MSDs should:

- talk to their line manager as soon as the problem occurs, identify psychosocial factors that influence their condition and make suggestions on how they want to continue working
- stay in contact with their manager and colleagues during their sick leave to receive social support and to increase their colleagues' understanding of the workers' condition
- if this is impossible, e.g. because harassment by their supervisor is the underlying psychosocial risk factor, they should contact the HR department or the workers' council
- seek professional support and talk about their condition; naturally, medical support comes first, but sometimes psychological coaching is also necessary, especially if workers feel ashamed of having a weakness.

#### 4. Positive attitude to returning to work and the changes involved

- Thinking positively about returning to work is vital. A healthy organisational culture creates a positive atmosphere and supports positive thinking; still, workers must also be aware that a good and well-supported return-to-work process will have a positive effect on their work ability and offers a new chance.
- Workers must be aware that, even if the company provides support and the workers themselves do their best, interventions may not work out the way they were planned and have to be modified. So they need to be open to feedback from others, about what works and what doesn't, and be proactive in addressing problems when they return.
- Workers should be ready and willing to accept changes in tasks or roles, which might be necessary to enable them to continue working.

These are general recommendations for returning to work, and they are particularly relevant for those returning to work with MSDs (which often cannot be cured, are chronic and associated with pain and stress).

The more positive the thinking and the greater the readiness to accept changes, the easier it will be for the worker. Psychological coaching or psychotherapy help to develop positive thinking and are therefore often included in rehabilitation programmes.

#### 5. Active participation

- Every worker should get actively involved in the return-to-work process. In companies with good OSH standards participation goes without saying, but it still remains the worker's personal responsibility. Self-management as mentioned earlier is a part of being active.

Here are some examples of how workers with MSDs can actively participate:

- contact their line manager early to talk about the situation and make their own suggestions about what might help (before a long sickness absence from work becomes necessary)
- talk with colleagues to promote understanding
- get in contact with health professionals (medical, psychological) in time to get early support and discuss what might help; describe what exactly works, where the limitations are and consider strategies for pain management
- be open to addressing psychosocial factors in ad hoc assessments, such as injustice or lack of control
- contribute their own ideas about what is needed to ensure a smooth return to work; these suggested interventions could be of an ergonomic, organisational or psychosocial nature
- when returning to work, be willing to 'give' something in exchange (e.g. a worker with a chronic MSD might have difficulty with night shifts, which the team has to cover; the worker could offer to cover a weekend day shift in return).

#### 6. Staying in contact with the company during sick leave

This has been mentioned earlier but it cannot be stressed enough. It is important for workers to stay in contact with their line manager and colleagues to promote understanding and support. Social support is one of the main factors in successful early intervention and return to work.

Source: table compiled by the author, based on several EU-OSHA publications on MSDs (EU-OSHA, 2020d, 2021) and her own experience as a return-to-work manager in Austria.

With some exceptions, all companies can apply the facilitators listed in Table 1 to help workers with MSDs to return to work successfully. However, this might be more difficult for SMEs. Most of them will not have the expertise in house, but they can nominate (and train) people who can be approached by workers and who will be in charge of providing external support for return to work. SMEs can get help

and advice from external services. In many countries there are special counselling services available <sup>(9)</sup> and health insurance companies and government or community-based programmes offer OSH and return-to-work support to SMEs.

## Practical examples of return to work

The following section demonstrates by means of two examples how the general guidelines for return to work can be followed for workers with MSDs. The two companies mentioned in these examples both provide return-to-work programmes. While the importance of assessing psychosocial risk factors was underlined in the practical example described earlier, the following case studies demonstrate the importance of psychosocial aspects in the return-to-work process.

### Case 1: Cleaning worker in a hospital

Case 1 is based on evidence collected by the author and is chosen because it demonstrates the importance of taking a holistic approach — that considers all psychosocial aspects — to the reintegration of workers with MSDs.



**Background.** A 52-year-old woman works as a cleaner in a general hospital. There the majority of cleaning work is done by staff directly employed by the hospital. The hospital uses agency workers only for special tasks. Nearly half of the cleaning staff are over 50 years old, and two thirds are women. The woman is a refugee from the wars in the former Yugoslavia but has lived in Austria for 25 years. She works full time, 5 days a week, in a shift system including weekends but not night shifts. She is a reliable employee, well integrated and

respected by her line manager and colleagues. She is divorced and has grown-up children. She would like to work for a further 10 years to get a good retirement pension. In recent years she has repeatedly complained about lower back pain and has taken short periods of sick leave and received pain treatment and physiotherapy. In the months before her last period of sick leave, she had been working extra shifts for economic reasons. Then an incomplete lumbar disc prolapse forced her to stay at home. She received medication but not an operation and was on rehabilitation for 3 weeks. Overall, she was absent from work for nearly 2 months. The hospital has an inclusive health policy that also provides for return to work. After 21 days of sick leave every employee is invited to discuss what support will be needed to ensure a smooth return to work. In addition, the cleaning manager has built up a health promotion programme with health forums in different languages where workers discuss work-related health problems and exchange ideas on how to promote good health at work. A ‘health multiplier’ has been trained as a contact person for workers. The team and line managers have been trained in healthy leadership, an ergonomics programme has been initiated (assessing all work tasks and their suitability for older workers) and ergonomic training on the job has been intensified.

**The return-to-work process.** From the very first day of her sick leave the worker was in contact with her line manager whom she trusted. She took up the invitation to the return-to-work interview with her line manager and a member of the integration team after her period of rehabilitation. Together they worked out a reintegration plan. They agreed that she would return to work gradually over 3 months

<sup>(9)</sup> In Austria, the Workers’ Compensation Board (AUVA, Allgemeine Unfallversicherungsanstalt) supports companies with fewer than 51 employees through its AUVAsicher OSH programme and offers business and individual counselling and return-to-work-support through its fit2work programme, which is open to all.

and slowly build up her working hours. The company physician was consulted and approved this stepwise return. The worker committed herself to going for physiotherapy regularly and was allowed to take short breaks from work to do her exercises or have a rest on her return. An ad hoc risk assessment was carried out by an OSH expert examining her work tasks. As a result, some of her equipment and tasks were changed for ergonomic reasons; she no longer needed to climb ladders or empty heavy buckets. While she had previously been working mostly on her own, she was now integrated into a small working team so that she could get support from colleagues if needed. Her colleagues were informed about her reintegration and were supportive, and her team leader would enquire about her work ability at the end of each day. In addition, her line manager organised a social worker to help her sort out her personal economic situation and her financial liabilities. Thanks to all these changes, the worker succeeded in returning to and staying in work.

To summarise, the keys to success were:

- the organisation's health policy;
- involving the worker when developing the reintegration plan;
- the support of the line manager and colleagues;
- a gradual return to work;
- support from professionals (company physician, social worker);
- a risk assessment focusing on her tasks (not just her general job) and reorganising her work;
- changing her tasks and equipment and providing social interaction (organisational changes);
- the ability to take breaks whenever needed; and
- an appreciative work culture in the department.

### **Case 2: Receptionist in a medium-sized company**

This case study is one of those published by EU-OSHA (2020d); it is presented in this article because it is a good example of a worker with mainly computer-based and sedentary work suffering from an MSD and still being able to return to work thanks to measures to prevent psychosocial risks.



**Background.** The woman is in her sixties and works as a receptionist in a medium-sized company. Her work is mainly computer based, so she sits a lot. She manages the telephone switchboard, the reception and email accounts and arranges postal and courier deliveries. She had been suffering from osteopenia (reduced bone density) and osteoarthritis (pain and stiffness in the affected joints) even before she started to work as a receptionist. These problems were already known to the company when she started work there. When the problems got worse, she was provided with a chair with special armrests and a back support (early intervention — adjustments). In an accident at home she broke two vertebrae in her

back, tore her ankle ligaments and injured her knee. She was on sick leave for 6 months, receiving medication and other treatment. Her line manager and the HR manager and colleagues kept in touch with the receptionist during her sick leave and also supported her decision to return to work.

Her company carries out regular risk assessments, including DSE <sup>(10)</sup> risk assessments, and it has sit-stand workstations and equipment with different designs such as mice and touchpads. The organisation has a return-to-work policy that includes an incremental return to work.

Her return to work was gradual and lasted 3 months. She was still using crutches and receiving physiotherapy when she went back to work. An ergonomic team assessed the workstation with her. Several tools and pieces of equipment were adapted to her needs: she was given a better headset, a new footrest and a special chair and space was freed up around her so that she could get up and move around during frequent short breaks.

Her line manager was very supportive. Manual handling tasks such as postal deliveries and storing were taken over by other colleagues. Thanks to these minor changes in her work tasks and environment, she was successfully reintegrated into her original job as a receptionist.

To summarise, the critical factors in this success were:

- a return-to-work policy;
- an appreciative organisational culture;
- involving the worker;
- support from the HR department and line manager as well as colleagues;
- a stepwise increase in working hours;
- a special risk assessment during the return-to-work process;
- adapting the equipment and tools used;
- the ability to take breaks;
- organising support and delegating unsuitable tasks.

As the worker herself put it: it was the understanding and support she experienced that helped her most.

## Conclusions

MSDs are demanding health issues affecting the working population. As people are living and working longer, the prevalence and impact of musculoskeletal conditions are predicted to increase further. Simultaneously, the nature of work is changing (e.g. teleworking) and new risks are arising, meaning that psychosocial factors, such as having control over one's work or good social support, become even more important.

For individuals and organisations alike, it is important to maintain workers' musculoskeletal health throughout their working life and thus ensure that they experience better health, take less sick leave, maintain their work ability and stay longer in their jobs. Better health and higher quality of life last long beyond the working years. Promoting, maintaining and regaining musculoskeletal health is a win-win situation.

High **OSH standards** are paramount to achieving this. Organisations should develop an **inclusive health policy** and a coherent OSH strategy that — based on regular assessments — covers health promotion, prevention and return to work as well as adapting the workplace, work environment and equipment.

It should be highlighted that the **general principles of OSH prevention** also apply to the prevention of psychosocial risk factors for MSDs: risks need to be identified and they should be avoided as far as possible by combatting them at source and adapting the work to the needs of workers. Collective measures are preferred, and training and instruction should be provided.

One of the key messages is that MSDs are associated not only with physical risk factors but also with organisational and psychosocial risk factors at work. Such factors are linked and play an important role

---

<sup>(10)</sup> DSE — display screen equipment.

in the development of work-related MSDs. Interventions to improve and reduce psychosocial stress factors may have a major impact on recovery from MSDs and a sustainable return to work.

This implies that risk assessments should cover a broad range of risks — they should be **holistic risk assessments**.

Once MSDs have developed, the first step is **early intervention** through **adjusting the work** and offering **individual support**. The next step is to provide efficient **return-to-work programmes** at the workplace by adapting work organisation, workstations, working hours, equipment, etc., to the needs of the returning workers and by allowing a partial or gradual return to work. Returning to work with an MSD does not mean that the worker has to be fully recovered from the MSD or be fully fit for work. Work ability with an MSD means that the individual has resources that match their work tasks and working conditions and — in spite of all the limitations imposed by the MSD — allow them to fulfil their work tasks adequately. **Interventions at the workplace**, complemented by individual measures (rehabilitation, physiotherapy, psychological coaching, etc.), will be necessary. The organisation will have to promote **a positive and supportive attitude** (which includes raising awareness among managers) to make it easier for workers to speak about their conditions and reduce their fears. The return-to-work process should be supported by a **multidisciplinary approach** involving various professionals and experts.

The examples presented in this article illustrate how to achieve a balance between working with an MSD and work demands and how important psychosocial aspects are for a successful reintegration into work and staying in work.

The author strongly believes that many MSDs caused or aggravated by work, especially when associated with psychosocial risk factors, could be avoided if enterprises and organisations fostered an appreciative healthy working culture, provided good working conditions and promoted wellbeing at work, took the OSH regulations seriously and truly involved workers in risk prevention and return-to-work processes.

**Author:** Irene Kloimüller, Kloimüller Co KG/Wert:Arbeit; [www.wertarbeit.at](http://www.wertarbeit.at)

Project management: Malgorzata Milczarek, Maurizio Curtarelli, European Agency for Safety and Health at Work (EU-OSHA).

*This discussion paper was commissioned by the European Agency for Safety and Health at Work (EU-OSHA). Its contents, including any opinions and/or conclusions expressed, are those of the authors alone and do not necessarily reflect the views of EU-OSHA.*

©EU-OSHA, 2021. *Reproduction is authorised provided the source is acknowledged*



## References

- Arbeit- und Gesundheit-Gesetz — AGG (Arbeit- und Gesundheit-Gesetz: Bundesgesetz, mit dem ein Informations-, Beratungs- und Unterstützungsangebot zu Arbeit und Gesundheit geschaffen wird), BGBl. I, Nr. 111/2010 (Art. 114 des Budgetbegleitgesetzes 2011), in der Fassung der Bundesgesetze BGBl. I, Nr. 3/2013 (Art. 4 des Sozialrechts-Änderungsgesetzes 2012), BGBl. I, Nr. 138/2013 (Art. 13 des Arbeitsrechts-Änderungsgesetzes 2013), der Verordnung BGBl. II Nr. 59/2014. [Federal Law which offers information, advice and support services in labour and health issues (Labour and Health Act), Federal Law Gazette No I, No 111/2010 (§ 114 of the Budget Accompanying Act 2011) as amended in 2013, Federal Law Gazette No 3/2013 (§4 of the Social Reform Act 2012), Federal Law Gazette No I, No 138/2013 (§13 of the Workers' Rights Reform Act 2013), of the provision, Federal Law Gazette No II, No 59/2014.] Available at: <https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=20007058>
- Bevan, S., 2015, 'Economic impact of musculoskeletal disorders (MSDs) on work in Europe', *Best Practice & Research Clinical Rheumatology*, Vol. 29, No 3, pp. 356-373.
- Engel, G. L., 1977, 'The need for a new medical model: a challenge for biomedicine', *Science*, Vol. 196, No 4286, pp.129-136.
- EU-OSHA (European Agency for Safety and Health at Work), 2016, *Rehabilitation and return to work: analysis report on EU and Member States policies, strategies and programmes*. Available at: <https://osha.europa.eu/en/publications/rehabilitation-and-return-work-analysis-report-eu-and-member-states-policies-strategi-0>
- EU-OSHA (European Agency for Safety and Health at Work), 2019a, *Work-related musculoskeletal disorders: prevalence, costs and demographics in the EU*. Available at: <https://osha.europa.eu/en/publications/msds-facts-and-figures-overview-prevalence-costs-and-demographics-msds-europe/view>
- EU-OSHA (European Agency for Safety and Health at Work), 2019b, *Third European Survey of Enterprises on New and Emerging Risks — ESENER 3*. Available at: <https://osha.europa.eu/en/publications/third-european-survey-enterprises-new-and-emerging-risks-esener-3/view>
- EU-OSHA (European Agency for Safety and Health at Work), 2019c, *Conversation starters for workplace discussions about musculoskeletal disorders*. Available at: <https://osha.europa.eu/en/publications/conversation-starters-workplace-discussions-about-musculoskeletal-disorders/view>
- EU-OSHA (European Agency for Safety and Health at Work), 2020a, *Work-related musculoskeletal disorders: from research to practice. What can be learnt? European Risk Observatory Report*. Available at: <https://osha.europa.eu/en/publications/work-related-musculoskeletal-disorders-research-practice-what-can-be-learnt/view>
- EU-OSHA (European Agency for Safety and Health at Work), 2020b, *Work-related musculoskeletal disorders: why are they still so prevalent? Evidence from a literature review. European Risk Observatory Report*. Available at: <https://osha.europa.eu/en/publications/work-related-musculoskeletal-disorders-why-are-they-still-so-prevalent-evidence/view>
- EU-OSHA (European Agency for Safety and Health at Work), 2020c, *Workforce diversity and musculoskeletal disorders: review of facts and figures and examples. European Risk Observatory Report*. Available at: <https://osha.europa.eu/en/publications/preventing-musculoskeletal-disorders-diverse-workforce-risk-factors-women-migrants-and>
- EU-OSHA (European Agency for Safety and Health at Work), 2020d, *Analysis of case studies on working with chronic musculoskeletal disorders*. Available at: <https://osha.europa.eu/en/publications/analysis-case-studies-working-chronic-musculoskeletal-disorders/view>

- EU-OSHA (European Agency for Safety and Health at Work), 2021, *Working with chronic musculoskeletal disorders. Good practice advice*. Available at: <https://osha.europa.eu/en/publications/working-chronic-msds-good-practice-advice/view>
- EU-OSHA (European Agency for Safety and Health at Work), undated, 'The OSH Framework Directive', Article 15. Available at: <https://osha.europa.eu/en/legislation/directives/the-osh-framework-directive/1>
- Eurofound, 2015, *European Working Conditions Survey 2015*. Available at: <https://www.eurofound.europa.eu/en/surveys/european-working-conditions-surveys/sixth-european-working-conditions-survey-2015>
- Eurogip, 2007, *Musculoskeletal disorders in Europe: definitions and statistics*, Eurogip, Paris.
- Eurostat, 2014, *European Health Interview Survey (EHIS)*. Available at: [https://ec.europa.eu/eurostat/cache/metadata/en/hlth\\_det\\_esms.htm](https://ec.europa.eu/eurostat/cache/metadata/en/hlth_det_esms.htm)
- Hauke, A., Flintrop, J., Brun, E. and Rugulies, R., 2011, 'The impact of work-related psychosocial stressors on the onset of musculoskeletal disorders in specific body regions: a review and meta-analysis of 54 longitudinal studies', *Work & Stress*, Vol. 25, No 3, pp. 243-256.
- OSHWiki, 2019, 'Working with rheumatic and musculoskeletal diseases (RMDs)'. Available at: [https://oshwiki.eu/wiki/Working\\_with\\_rheumatic\\_and\\_musculoskeletal\\_diseases\\_\(RMDs\)](https://oshwiki.eu/wiki/Working_with_rheumatic_and_musculoskeletal_diseases_(RMDs))
- SWEA (Swedish Work Environmental Authority), 2020, 'Gender equality in the work environment'. Available at: <https://www.av.se/en/work-environment-work-and-inspections/gender-equality-in-the-work-environment/>
- WHO (World Health Organization) 2019, 'Musculoskeletal conditions'. Available at: <https://www.who.int/news-room/fact-sheets/detail/musculoskeletal-conditions>
- Wiedereingliederungsteilzeitgesetz, 30, Bundesgesetz: Wiedereingliederungsteilzeitgesetz (NR: GP XXV RV 1362 AB 1440 S. 158. BR: AB 9680 S. 862). [Federal Law No 30: Part-Time Reintegration Act (No GP XXV RV 1362 AB 1440 S. 158. BR: AB 9680 S. 862.)] Available at: [https://www.ris.bka.gv.at/Dokument.wxe?Abfrage=BgblAuth&Dokumentnummer=BGBLA\\_2017\\_I\\_30](https://www.ris.bka.gv.at/Dokument.wxe?Abfrage=BgblAuth&Dokumentnummer=BGBLA_2017_I_30)