







Musculoskeletal disorders and workforce diversity:

risk factors and prevention initiatives in specific groups of workers.

Key points

- The European workforce is increasingly diverse, and legislation has been introduced to take account of this, to enforce equality and to improve safety and health at work for all. Despite this, some groups of workers are still exposed to particular risks more than others.
- Musculoskeletal disorders (MSDs) are caused and exacerbated by physical, psychosocial, organisational and individual risk factors (often interacting with each other).
 Accumulated exposure to such risks over time increases the probability of experiencing occupational safety and health (OSH) issues and MSDs.
- Women, LGBTI (Lesbian, gay, bisexual, transgender and intersex) and migrant workers are more frequently exposed to psychosocial risks, including discrimination, bullying, harassment and verbal abuse.

Healthy Workplaces Lighten the Load

The European Agency for Safety and Health at Work (EU-OSHA) is running a Europe-wide campaign from 2020 to 2022 to raise awareness of work-related musculoskeletal disorders (MSDs) and the importance of preventing them. The objective is to encourage employers, workers and other stakeholders to work together to prevent MSDs and to promote good musculoskeletal health among EU workers.

Workforce diversity and prevalence of health problems and MSDs

Workforce diversity refers to the heterogeneous composition of the workforce in terms of workers' socio-demographic and physical characteristics, such as age, gender, nationality, sexual orientation and disability. The European workforce is increasingly diverse as a result of the influx of migrant and refugee workers, the growing number of second-generation migrant workers, the increased participation of women in the labour market, the active ageing policies increasing the number of older workers in the workforce, the increased visibility of LGBTI workers and the higher participation of disabled workers.

Certain groups of workers frequently report a higher prevalence of work-related health problems, including MSDs. Some of these groups have been selected for in-depth analysis (women, migrant workers, LGBTI workers), and other disadvantages (age, low education level) were taken into account in the analysis. The aim was to fill research gaps and complement information about other groups of workers and their exposure to MSD-related risks, such as workers suffering from chronic health conditions¹ (e.g. rheumatic and musculoskeletal disorders) or young and future workers².

Women report work-related health issues and experience poorer general health more frequently than men. Data from the 2015 European Working Conditions Survey (EWCS) show that 60 % of women workers in the EU reported one or more MSD (56 % of men).

Migrant workers report poorer health, including infectious and metabolic cardiovascular diseases, mental health issues and a higher prevalence of MSDs, as well as more accidents at work and work-related injuries, than the general workforce.

LGBTI workers are at higher risk of poor mental and physical health than the general population, with an increased prevalence of long-term health problems, including MSDs, arthritis, spinal problems, depression, suicidal thoughts, anxiety and self-harm, and chronic fatigue syndrome.

Exposure to work-related health risk factors

MSD-related risk factors

Different groups of factors can contribute to work-related MSDs, including physical and biomechanical factors, organisational and psychosocial factors, and individual factors. These may act independently or in combination. So exposure to a combination of risk factors should be considered when assessing work-related MSDs.

Risk factors for women workers

Women workers are particularly exposed to a number of work-related physical risk factors for MSDs. EWCS data for 2015 show that a significant proportion of women workers reported being employed in jobs involving prolonged sitting (62 %), use of computers (62 %) and repetitive hand or arm movements (61 %) for at least a quarter of their working time. Approximately 42 % of women reported working in tiring or painful positions for at least a quarter of their working time, and around 15 % were employed in a job involving lifting or moving people.

Women are particularly represented in sectors (e.g. education, social work, commerce and trade, hospitality, cleaning services, call centres, hairdressing, public sector) and jobs (e.g. personal carers, cleaners, clerks, health professionals, teaching professionals) where such risks are common.

Women workers are particularly exposed to organisational and psychosocial risk factors that may lead — especially in combination with physical risk factors — to a higher risk of suffering MSDs:

- discrimination, harassment and unwanted sexual attention;
- · work-life balance and women's 'dual role';
- work-related stress, emotional demands;
- lack of career opportunities and gender pay gap;
- atypical forms of employment;
- · women's limited voice and rights;
- prevailing male-dominated perspective on occupational diseases and OSH issues.

Women workers are also exposed to increased MSD risks because many OSH tools, protective personal equipment (PPE) and jobs do not take into account the physical characteristics of female bodies.

¹ https://osha.europa.eu/en/publications/working-chronic-rheumatic-and-musculoskeletal-diseases/view

² https://oshwiki.eu/wiki/Musculoskeletal_Disorders_in_Children_and_Young_People

Risk factors for migrant workers

Migrant workers are more exposed to physical risks than native workers. According to 2015 EWCS data, 40 % of migrant workers spend at least a quarter of their time carrying or moving heavy loads (31 % for native workers) and 51 % spend at least a quarter of their time in tiring or painful positions (43 % for native workers). Migrant workers are also more exposed to risks such as vibration, environmental hazards such as toxins, extreme temperatures, and pesticides and chemicals, and have more accidents at work.

Migrant workers are more likely to work in '3D' jobs (dirty, dangerous and demanding), which are associated with poor working conditions and increased OSH risks. They are frequently employed in agriculture, manufacturing, mining and energy, health care and social work, and construction — and are more likely to get low- or unskilled jobs.

Evidence shows that the higher prevalence of MSDs among migrant workers is associated with both physical risks and organisational and psychosocial risks:

- · bullying, harassment and discrimination at work;
- · feelings of isolation and lack of support;
- discrimination;
- · temporary and precarious work;
- · long working hours, overtime, unsocial working hours;
- lack of career opportunities and low salaries;
- limited (OSH-related) training and lack of involvement in OSH-related activities;
- · lower bargaining power with employers;
- limited knowledge of host country's language and culture;
- limited access to housing and health services.

Lower salaries push migrant workers to work multiple jobs to make ends meet, causing more stress and fatigue. Their lack of active involvement in OSH activities designed and implemented at workplace level, together with their limited representation on works councils, reduces the likelihood of migrants' health issues being brought to management's attention and represent additional risks.

Risk factors for LGBTI workers

LGBTI workers are exposed to a number of organisational and psychosocial risk factors in the workplace, such as discrimination, concealment strategies and 'microaggressions', such as jokes and ridicule, stares, gossip and negative comments, which contribute to a sense of feeling unsafe and can lead to self-isolation, with negative consequences for their mental and physical health, including MSDs.

LGBTI workers are more frequently employed in sectors and occupations where they expect to feel safer and experience less intolerance and discrimination, according to 'prejudice-based segregation'. Some studies also found that the need to conceal their sexual orientation or gender identity is important in shaping LGBTI workers' career choices, as they might avoid occupations in which concealment is difficult and disclosing their sexuality could have a high penalty. The public sector is regarded as one of the safest, while large and multinational companies are increasingly promoting diversity, inclusion and anti-discrimination practices, and are therefore more likely to attract LGBTI workers.

LGBTI workers are particularly exposed to the following risk factors:

- discrimination in accessing employment and increased chance of being fired;
- · institutional discrimination;
- discrimination on multiple grounds (e.g. gender, sexual orientation, age and nationality or race);
- · interpersonal discrimination and 'microaggressions';
- · harassment, bullying and verbal abuse;
- · unwanted sexual attention;
- concealment of sexual orientation and gender identity in the workplace;
- lower salaries and limited promotion opportunities and career prospects;
- increased job insecurity, temporary and precarious work.



Preventing MSDs in a diverse workforce

Ensuring a safe and healthy workplace for all workers is a legal imperative set out in the OSH Framework (Directive 89/391/EEC)³. This requires employers to carry out risk assessments and emphasises the need to 'adapt the work to the individual' and include in risk assessments 'those facing groups of workers exposed to particular risks'⁴.

Taking into account gender and diversity issues in risk assessment⁵ is key to healthy and productive workplaces. Work, its organisation and the equipment used should be designed to match workers' characteristics and needs at work — not the other way round⁶.

Below are a few examples of initiatives and company practices aimed at improving OSH and preventing MSD-related risks among women, migrant and LGBTI workers:

REDI – Business Network for LGBTI Inclusion and Diversity⁷ (Spain)

REDI (Red Empresarial por la Diversidad e Inclusión LGBTI — Business Network for LGBTI Inclusion and Diversity) is a non-profit network association whose members include some of the largest Spanish companies and multinationals located in Spain. REDI has developed a number of activities to foster an inclusive and respectful environment in organisations, helping to eradicate socio-cultural prejudices and discrimination practices that hinder LGBTI workers' professional development and performance and creating a safe working environment with reduced psychosocial risks.

Risk assessment toolkit for non-EU nationals⁸ (Lombardy, Italy)

The initiative 'Valutazione dei rischi per la sicurezza e la salute con riferimento alla provenienza da altri paesi' (Health and safety risk assessment for non-native workers) was launched in 2009 by the Brescia health authority in collaboration with social partners to help workplaces incorporate OSH risks related to non-EU migrant workers into their risk assessment process and to promote OSH-related activities specific to them. The initiative developed a risk assessment toolkit to evaluate the personal, social and work-related risk factors that contribute to migrants' increased vulnerability in the workplace.

Toolkit for the Integration of the Gender Perspective in the Prevention of Occupational Risks⁹ (Basque Country, Spain)

In 2017 Osalan, the Basque Institute of Occupational Safety and Health, with the support of Emakunde, the Basque Women's Institute, developed a gender-sensitive risk-prevention toolkit (Guidelines for the integration of the gender perspective in the prevention of occupational risks') with the aim of raising awareness among all workers, employers and prevention service experts of the sexual (biological) and gender (cultural) differences between men and women, so that they can be taken into account when developing and implementing occupational risk prevention activities.

- 3 https://oshwiki.eu/wiki/Policy,_law_and_guidance_for_psychosocial_issues_in_the_workplace:_an_EU_perspective https://osha.europa.eu/en/legislation/directives/the-osh-framework-directive/the-osh-framework-directive-introduction
- 4 https://osha.europa.eu/en/publications/factsheets/87
- $5\ https://osha.europa.eu/en/publications/factsheet-43-including-gender-issues-risk-assessment$
- 6 Diversity-sensitive risk assessment, Guide EMEX SLIC. Language versions available at: https://circabc.europa.eu/ui/group/fea534f4-2590-4490-bca6-504782b47c79/library/e9ec023f-cb5f-4e09-ac6a-6b5ffe05e729?p=1&n=10&sort=modified_DESC
- 7 https://www.redi-lgbti.org
- 8 https://www.cislbrescia.it/wp-content/uploads/2011/11/Un-progetto-sulla-sicurezza-per-i-lavoratori-stranieri.pdf
- $9\ https://www.osalan.euskadi.eus/contenidos/libro/gestion_201710/es_def/adjuntos/pautas_integracion_prl.pdf$

Further information

Preventing musculoskeletal disorders in a diverse workforce: risk factors for women, migrants and LGBTI workers: https://osha.europa.eu/en/publications/preventing-musculoskeletal-disorders-diverse-workforce-risk-factors-women-migrants-and/view

Summary — Preventing musculoskeletal disorders in a diverse workforce: risk factors for women, migrants and LGBTI workers: https://osha.europa.eu/sites/default/files/publications/documents/Workforce_diversity_MSDs_facts_figures_summary.pdf

Thematic section on preventing and managing MSDs:

https://osha.europa.eu/en/themes/musculoskeletal-disorders



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