

# **POLICY CASE STUDY**



# SWEDEN: WOMEN'S WORK ENVIRONMENT AND MSDs PREVENTION

# 1 Summary

Swedish statistics show a gradual decline in the rate of occupational ill health over the last 15 years for both men and women. A more detailed analysis showed that the rate of ill health among women was higher than that for men and that more women than men ended their working lives early for health reasons, especially because of musculoskeletal disorders (MSDs).

The national occupational safety and health (OSH) strategy in Sweden can be seen against a background of efforts in the late 1990s towards achieving gender equality and 'mainstreaming' the gender aspect in all policies. With the concept of mainstreaming pervading all government thinking, gender and work therefore emerged as a theme reflecting this wider perspective.

Against this background and the demonstrable gender inequality in health problems, the Swedish Work Environment Authority (SWEA — Arbetsmiljöverket) was assigned a task to investigate 'women's work environment' and the causes of higher sickness rates in women, leading to their early exit from the labour market. The assignment encompassed knowledge generation and disseminating that knowledge to key players, including labour inspectors, to build an evidence-based course of action.

The assignment encompassed generating knowledge in relation to women's occupational health (including their higher risk for developing MSDs) awareness raising, and developing better methods of highlighting the gender inequalities at work that are putting women at increased risk of developing MSDs. The knowledge generated and the increased awareness was expected to lead to greater gender sensitivity in workplaces and an improved working environment for both men and women.

The assignment was implemented through a programme comprising two projects. Activities included research, awareness-raising and dissemination activities, training of inspectors and targeted inspection campaigns. The programme started with a survey of employers that provided benchmark measurements as a starting point. This revealed a low level of awareness of MSDs and gender issues and that only a small proportion of employers were giving equal consideration to men and women's prerequisites in allocating tasks.

The knowledge generation covered gender-specific issues related to the work environment and the organisational and psychosocial factors for work-related and health-related outcomes.

Targeted inspection campaigns formed an integral part of the programme, and inspectors were given training on adopting a gender perspective in assessing MSD risks and on techniques developed during the project. Some campaigns covered a broad range of sectors, while others included workplaces where manual handling or repetitive work occurred; workplaces within health care and social care settings with a focus on the assessment of risks for MSDs during patient transfer; and work environments where maledominated technical administration jobs were compared with female-dominated home care services. These inspections were aimed at increasing the employers' knowledge about the risks of MSDs and their prevention.

Dissemination of knowledge was also part of the initiative. As well as the research reports, conferences helped to disseminate the findings. The SWEA also developed a set of materials including brochures for employers and two films. In addition, dialogue with employers on the gender perspective in systematic work environment management provided a more comprehensive picture of the risks and shortcomings of the work environment for both women and men.

The challenges for the success of the initiative appear primarily to have been a lack of knowledge and inflexibility of thinking, especially within male-dominated sectors. Providing information appears to have borne fruit (e.g. as shown by the actions reported by municipalities that took part in one strand of the work).

However, it was concluded that greater changes are needed in the workplace in terms of governance, management, organisation and allocation of resources to improve women's and men's working conditions and work environment. The prerequisites for change must be created at the organisational level and, in municipalities, at the political level.

The project serves to highlight a number of policy issues. Of these, possibly the most far-reaching stems from the approach of encouraging gender awareness by focusing on those sectors in which women predominate in the workforce. Building on this, similar thinking is now being applied more widely, including to minority and vulnerable groups such as immigrants. Adopting similar thinking could see a focus on the risks in sectors associated with the temporary or part-time work more likely to be undertaken by such groups.

#### **National background** 2

#### Relevant statistics and trends 2.1

Sweden has a long tradition of reporting occupational data through Work Environment Statistics reports, usually including an analysis of the occupational health statistics, emphasising gender-specific trends.

National data (SWEA, 2018, Arbetsskador 2018: Occupational accidents and work-related diseases) show that there has been a slight downward trend in occupational accidents and illnesses in general for men over the last 15 years. For women the picture is somewhat more complex in that the statistics show a decline in occupational illnesses, while accident levels have remained relatively unchanged. Figure 1, drawn from that report, illustrates these patterns. However, most of the downward trend preceded 2009 and there have been much smaller changes in recent years.

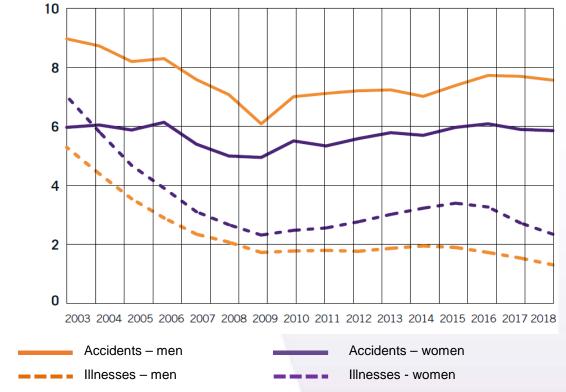
On the types of illnesses, SWEA statistics for 2018 show that, for women, psychosocial problems form the biggest category (45 %) and MSDs the second biggest (27 %). For men, the order is reversed with muscle and joint problems predominating (38 %) and psychosocial problems second (20 %) (1).

Trends in these illnesses over preceding years are not available. However, data are presented in the same report for the main contributory causes reported for diseases reported to the SWEA (ergonomic load factors, organisational and social load factors, and biological/chemical factors). It might reasonably be assumed that, although there will be some cross-over, ergonomic factors will contribute predominantly to musculoskeletal diseases, while psychosocial problems will mainly have their source in organisational and social issues.

As might be expected, a breakdown of the reporting of main causal factors by employment sector show that ergonomic factors predominate in sectors such as manufacturing, while organisational and social factors are reported as the main causal element in service sectors such as public administration. The data show that, relative to 2003, women have overall reported a decrease in diseases caused by ergonomic load factors with organisational and social load factors showing an initial fall (2003-2009) followed by an increase (2009-2016) before declining again in recent years (Figure 2a). For men (Figure 2b) the pattern the pattern is similar, with ergonomics load factors steadily declining, while organisational and social load factors fell to a low point in 2008, rose from then until 2016 - the incline was less than for women - and are now showing a further decline.

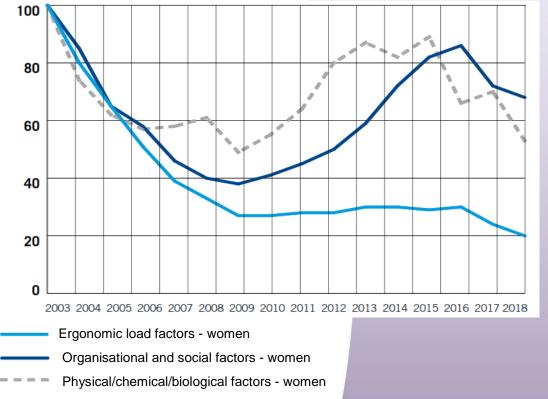
<sup>(&</sup>lt;sup>1</sup>) SWEA (2018) Arbetsskador 2018: Occupational accidents and work-related diseases, Arbetsmiljöstatistik Rapport 2019:01. Swedish Work Environment Authority, Stockholm.

Figure 1. Trends in occupational accidents resulting in sickness absence and illnesses for men and women (rates per 100,000 workers



Source: SWEA, 2018

Figure 2a. Trends in the main factors to which occupational illnesses are attributed, relative to 2003 (100) for women.



Source: SWEA, 2018.

80
60
40
20
2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018
Ergonomic load factors - men
Organisational and social factors - men
Physical/chemical/biological factors - men

Figure 2b. Trends in the main factors to which occupational illnesses are attributed, relative to 2003 (100) for men

Source: SWEA, 2018.

## 2.2 Legislation

In Sweden, OSH is regulated through the Work Environment Act (WEA, 1978 — *Arbetsmiljölagen*). The WEA covers (nearly) all conditions and actors that may influence OSH. It is a framework act with broad requirements and it imposes a general preventive duty on employers. It applies to all areas of occupational life, including students, self-employed people military conscripts and inmates in institutions.

The provisions transposing the EU Framework Directive 89/391 into national law came into force in Sweden in 1991. In 2001, the provisions were updated and renamed systematic work environment management (SWEM). SWEM sees work environment management as an integral part of everyday business activity. Enterprises are obliged to provide a suitable work environment; develop a work environment policy; assess risks; devise plans for dealing with the risks identified; hold personnel meetings; provide OSH training for managers, safety representatives and staff; maintain contact with the occupational health service; and set up routines for reporting injuries and incidents. The underlying principle is that both employer and employees work together to improve the work environment. These general provisions of SWEM are at times supplemented by more specific work environment-related provisions. The provisions of the two risk-specific EU directives (2) — the Manual Handling and Display Screen Equipment (DSE) Directives — have been transposed into national law in Sweden.

In 2012, the SWEA issued Provisions and general recommendations on ergonomics for the prevention of MSDs (*Arbetsmiljöverkets föreskrifter och allmänna råd om belastningsergonomi*, AFS 2012:2). The provisions apply to every activity in which employees may be subjected to loads and to other working conditions that may have an adverse effect on the musculoskeletal system (section 2 of the provisions and general recommendations). They are binding on employers, and failure to adhere to the provisions may result in prosecution and fines (upon inspection by the SWEA). These provisions are more far reaching than those of the EU Manual Handling Directive and encompass other risks for MSDs, including all

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<sup>(2)</sup> Council Directive 90/269/EC on the minimum health and safety requirements for the manual handling of loads where there is a risk particularly of back injury to workers (Manual Handling Directive) and Council Directive 90/270/EEC on the minimum safety and health requirements for work with display screen equipment (DSE Directive).

combinations of work movements, postures, positions and workloads. The provisions cover investigation and risk assessment, stipulating that the risks must be assessed on the basis of the duration (how long), frequency (how often) and intensity (how much) of the load, and the assessment must take into account physical, organisational and psychosocial factors in the work environment. It is interesting to note the inclusion of a psychosocial element ('job decision latitude') within these provisions; however, this aspect is presented principally in the context of employers ensuring that workers can influence the arrangement and conduct of their work to ensure that they get sufficient variety of movement and opportunities for recovery.

Legal provisions also cover some specific risks in particular jobs, such as butchery undertakings and cash register operators in shops, and some elements of hospital work relating to overcrowded conditions.

Unlike the provisions, the general recommendations issued as part of these measures are not binding. They serve to inform employers of the appropriate ways of fulfilling the requirements (of the provisions) and provide practical solutions. They relate to employers' obligations to investigate possible health-endangering or unnecessarily fatiguing repetitive work and to take the necessary measures to reduce the risk to workers of developing MSDs (sections 3-8). This includes both organisational measures and the use of aids (especially technical equipment) to limit manual handling of loads by workers. The recommendations also highlight the need for increased knowledge and information sharing on this topic (section 9). The guidance (recommendations) also acknowledges the risks associated with sedentary work and the need to address them.

Legislation on display screen equipment is also wider reaching than the EU directive. It covers some types and applications of equipment not covered by the directive. In addition, risk assessments have to be updated annually and eyesight testing is required for all those using display screen equipment for more than an hour, with the express purpose of playing a preventive role by identifying those with deficiencies in their eyesight that require correction (enabling them to work with display screen equipment without incurring additional risks of developing MSDs).

Organisational and psychosocial risks are covered by "Provisions on the organisational and social work environment (with general recommendations on their application) that came into force in 2016. The purpose of these provisions is defined as promoting a good work environment and preventing risks of ill health due to organisational and social conditions in the work environment. The provisions remind the employer of their existing duties with respect to systematic work environment management requiring them to regularly assess the risks in the work environment and take actions to manage those risks. Specifically these new provisions require the employer to ensure that the tasks and responsibility assigned to employees do not give rise to unhealthy workloads (defined as 'when the demands in the work more than temporarily exceed the resources'). The provisions also place specific duties on employers to address the issue of victimisation.

#### 2.3 **National OSH strategy**

The national OSH strategy in Sweden can be seen against a background of developments to promote gender equality in the late 1990s towards what became known as 'gender mainstreaming'. According to Vanje (2013) (3):

'... the concept of mainstreaming was developed into a strategy in which all sectors of society had the responsibility for gender equality.'

Gender and work therefore emerged as a theme reflecting this wider perspective (although, according to national interviews, a broad gender equality stretches back much further, possibly to the late 1970s). This theme encompassed far more than the workplace, and the concept of mainstreaming pervaded all government thinking.

national OSH strategies are set by the Ministry (Arbetsmarknadsdepartementet). The current strategy, the Work Environment Strategy for Modern Working Life, developed in consultation with the social partners, covers the period from 2016 to 2020. It sets out the priorities for OSH over the course of five years, focusing on modern working life and the relevant new challenges, including those of technical, physical and psychosocial natures. The priority areas are as follows:

 $<sup>(^{3})</sup>$ Vänje A. (2013) Under the magnifying glass — Gender perspective in work environment and work organisation. Swedish Work Environment Authority, Stockholm.

- zero tolerance of fatal accidents and the prevention of accidents at work;
- a sustainable working life;
- the psychosocial work environment;
- work environment research

Thus, MSDs are not a main strand of the current OSH strategy in Sweden (although they should be covered under the sustainable working life priority area and might feature in the research programme.

# 3 The 'Women's work environment' programme

#### 3.1 Rationale behind the initiative

Prior to the initiation of the assignment it was recognised that the rate of ill health among women was higher than that for men and that more women than men were finding it necessary to end their working lives early for health reasons, especially because of MSDs. As a result, women tended to end up with a lower pension than would otherwise have been the case, increased financial insecurity and poorer health in retirement.

Prompted by this demonstrable inequality for women at work, in 2011 the Swedish Government gave an assignment to the SWEA on the topic of 'women's work environment' (Government Decision A2011/2209/ARM). The assignment, for the period from 2011 to 2014, encompassed knowledge generation and the dissemination of that knowledge to key players in OSH, including labour inspectors, to build an evidence-based course for action. The intervention targeted municipalities and county councils.

In September 2014, the SWEA received another assignment extending this first initiative to increase health and safety in mainly female-dominated sectors (to 'create and make accessible tools for risk assessment with a special focus on women's work environment').

In 2015, the SWEA was given further funding to continue the work to develop sustainable procedures for including the gender perspective in OSH management. Previously, the focus had been on the work environment in female-dominated activities but, in this new assignment, the scope was widened, responding to the question where — in which sectors — would the project be most effective in obtaining sustainable results.

Sweden has one of the most gender-segregated labour markets in Europe (4). This meant that focusing the initial initiative on those work sectors in which women predominated was a feasible approach to addressing the issues relating to women at work. However, it was recognised that, although the focus was on those work sectors in which women predominated (such as health care and social care), any actions taken would also be of benefit to the musculoskeletal health of men working in the same sectors, as actions would be focused on the work itself and would not be gender specific. This is important, as it reflects the need to be non-discriminatory.

# 3.2 Aims of the programme

The programme had several mutually reinforcing aims. These were to increase knowledge about and awareness of the status of women's occupational health (including their higher risk for developing MSDs) and to develop better methods in SWEA's inspections of highlighting gender inequalities at work that are putting women at increased risk of developing MSDs. This increased knowledge and awareness was expected to translate into greater gender sensitivity in workplaces and ultimately into an improved working environment for both men and women.

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<sup>(4)</sup> Vänje A. (2013) Under the magnifying glass — Gender perspective in work environment and work organisation. Swedish Work Environment Authority, Stockholm.

#### 4 What was done and how

The assignments were implemented through a programme comprising several projects, including 'Ergonomics in women's work environment' (EKA), and 'Sustainable work environment with women in focus' (HAK). The activities included research, awareness-raising and dissemination activities, training of inspectors and targeted inspection campaigns.

## 4.1 Benchmark survey

The programme started in autumn 2011 with a survey on employers' knowledge, attitudes and behaviour and on how employers see the differences in men and women's working conditions and prerequisites in their working lives. The aim of the survey was to obtain benchmark measurements for chosen target groups as a starting point for the work to bring about change. The survey was implemented through telephone interviews and focus groups with employers within several different sectors. The questions focused on two main aspects: (1) how employers see women and men's different working environments and conditions; and (2) the employer's awareness of MSDs in sectors in which related problems are common.

The survey revealed a low level of awareness about MSDs and gender issues and that, within all sectors, only a small proportion of employers were giving equal consideration to men and women's prerequisites during the allocation of tasks. Following this survey, the SWEA pointed out that the differences between genders in terms of MSDs should be addressed correctly and that all members of the SWEA had received at least one day of training focusing on inspecting with a gender perspective.

## 4.2 Literature reviews, research and analyses

Several research reports (also referred to as knowledge compilations) were prepared during the programme. They focused on gender-specific issues in the work environment, including those in relation to MSDs. It was concluded that there is marked gender segregation in working life, both horizontal and vertical; that men and women have different tasks, even if they work in the same occupation — men are generally assigned (or take) heavier tasks, while women perform repetitive tasks; and that women less often find themselves in power structures with the potential to influence their work situations.

The research also found disparities between men and women in relation to organisational factors at work. Thus, women were more likely to engage in part-time work, shift work and temporary employment, while their male counterparts were more likely to work long hours and to be employed in 'expanding organisations'. Differences in psychosocial work environment factors were also identified, with several types of job demands being more common among women than among men, including job strain and psychological and emotional demands. It was noted that these differences arose out of gender segregation, as such demands could be regarded as common in female-dominated occupations and sectors such as education, health care and social services.

# 4.3 Targeted inspections

Targeted inspection campaigns (carried out by SWEA inspectors) formed an integral part of the programme. In support of these inspection activities, work was carried out in conjunction with researchers from

Göthenbourg University and Stockholm University to develop a targeted inspection methodology. This entailed applying a gender perspective in comparing work environment conditions in a female-dominated organisation with conditions in a male-dominated organisation of the same employer, and it served to reveal the differences that clearly influence the work environment. This was applied during the SWEA 2013 inspection campaign 'Sustainable work environment with women in focus' (see below).

Ergonomics in women's work environment (EKA), 2012. The first inspection activity within the project EKA was carried out in about 700 workplaces where manual handling or repetitive work occurred, mainly within the food industry, manufacturing industry, vehicle industry, laundries, wholesale trade, hotel cleaning and the care of green spaces.

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- Approximately 70 % of the companies received administrative orders. The methods chosen for the evidence-based assessments of risks (due to MSDs) carried out as part of these inspections were the Key Indicator Method (KIM I, II and III), the hand-arm risk assessment method (HARM) and the Tilthermometer and Patient Transfer Assessment Instrument (PTAI).
- Ergonomics in women's work environment (EKA), 2013. During the second inspection campaign within the project EKA, SWEA inspected workplaces within health care and social care settings with a focus on the assessment of risks for MSDs during patient transfer. Of about 700 employers visited, over 75 % received administrative orders, most of them related to risk assessment procedures for patient transfer.
- Sustainable work environment with women in focus (HAK), 2013. In this targeted inspection campaign, SWEA inspectors assessed the work environment in 65 municipalities comparing that of male-dominated technical administration jobs with that of female-dominated home care services. The results revealed that there were significant differences between female- and male-coded activities within the same organisation. Home care services, mostly provided by women, had worse conditions and work environments than technical services, where most men work. Home care services had, among other things, more employees per manager, worse communication with decision-makers, more part-time employees, poorer cars and fewer support functions. All municipalities received administrative orders to implement measures to fix shortcomings in the work environment, with significantly more orders in home care services regarding both staff and managers' working conditions.
- Ergonomics in women's work environment (EKA), 2014. Similar to previous inspections, these were aimed at increasing employers' knowledge about the risks of MSDs and how these can be prevented.
   A broad range of sectors was covered by the inspections.
- Sustainable ergonomic work environment with women in focus (HEKA), 2014. This activity was a
  continuation of the HAK inspection done in 2013 but with a clearer focus on MSDs. The methods of
  risk assessment that were created earlier for the EKA inspections were used. Six municipalities were
  inspected.

In total about 41,000 workplaces were inspected. Furthermore, training on adopting a gender perspective in the assessment of risks for MSDs was organised for labour inspectors employed at the SWEA.

#### 4.4 Conferences and communication

In 2014, the SWEA organised a series of conferences to support the dissemination of the research findings. The seminars targeted politically elected representatives; managers; safety representatives; and work environment and gender equality strategists at the municipality level. The speakers included well-known researchers, and the municipalities were also invited to share examples from their experience. The SWEA also developed a set of communication materials including brochures for employers and two short films that can be viewed on YouTube.

During the programme, over the course of three years, in connection with International Women's Day, dialogues were started with a total of 2,600 employers on the gender perspective in systematic work environment management and on how the gender perspective can provide a more comprehensive picture of risks and shortcomings in the work environment for both women and men. These information campaigns generally received a positive reaction. The follow-up dialogues with SWEA inspectors showed that many employers appreciated the dialogue and that there was an interest in discussing the questions. Several employers stated that it was 'an eye-opener'.

#### 4.5 Costs

The collective programme involved considerable financial commitment. The SWEA was granted SEK 20.5 million (EUR 2.26 million) for the first assignment (for the period from 2011 to 2014) and an additional SEK 240,000 (EUR 26,400) for the second assignment. The Authority reported having spent SEK 19.6 million (EUR 2.2 million) in the period from 2011 to 2014 of which SEK 9.9 million (EUR 1.1 million) was for staff costs, SEK 6.3 million (EUR 693,000) was for premises and SEK 3.4 million (EUR 374,000) was other costs. The initiative involved a number of staff at the Authority including the inspectors. Other costs included the costs of following up with researchers and the cost of the seminars (approximately SEK 600,000 (EUR 66,000)). The cost of each research report (or knowledge compilation) was about SEK 1 million (EUR 110,000).

#### 4.6 Further work

The initial project was followed in 2014 by a second assignment to continue and further develop the work started in the first. In this second assignment, the SWEA developed information materials including an animated film and three lecture films that communicate the research findings during the period from 2011 to 2014.

Since 2014 the SWEA has had a commission to mainstream the gender perspective in its own organisation. This resulted in employing a gender strategist in 2017 to support the management team in strategically developing a gender perspective in all decision-making. Gender mainstreaming has been a success factor in ensuring the sustainability of the learning outcomes of the programme and the two follow-on projects.

The initiative has several innovative features. It focuses on gender differences and the specific risks faced by women at different levels in the workplace (e.g. occupational segregation, different tasks within the same occupation, different biological risks and susceptibilities to risks from the same task). The knowledge compilations will provide an ongoing resource for gender-aware actions both in Sweden and in other countries that choose to follow a similar pathway. The techniques and approaches adopted will also transfer to initiatives focused on other vulnerable groups.

Another innovative feature is the focus on generating evidence that can then inform further policy and action. The internal learning and competence development in the SWEA has been remarkable, consisting of training the inspectors, reflection dialogues with the inspectors after the inspections, gender education for all staff at the SWEA and mainstreaming the gender aspect in the SWEA's regular activities and inspections. A further innovative aspect is the development of methods for inspecting the workloads of both men and women from an organisational perspective, using a comparative methodology in inspections to compare the conditions in both men and women's working environments.

### 5 What was achieved and found

As well as the knowledge compilations described earlier, the SWEA produced a number of reports during the life of the project.

A series of reports addressed the programme of inspections summarised above. It was found that, of the 717 companies and organisations visited, only 30 % were not given administrative orders to take measures to improve OSH management. According to the reports, the three most common deficiencies identified were insufficient risk assessment (for MSD risks); insufficient knowledge on the part of employees on minimising physical overload; and the presence of identifiable risks (identified using the HARM tool referred to earlier).

The following year, the report *Ergonomics in women's work environment* — *Inspections with focus on the risk assessment of patient transfer within the health care and social care sectors* gave a similar account of a further inspection initiative. In this case, of the 692 companies and organisations visited, over 75 % received demands to remedy shortcomings in their work environments. The five most common demands that were made of employers were:

- investigation and assessment of risks for MSDs;
- planning and implementing risk-reducing measures;
- written procedures stating when and how the risks of being affected by ill health and accidents will be investigated;
- procedures for reporting and investigating incidents, ill health and accidents;
- sufficient knowledge about patient handling.

The success factors for good work environment were identified, and these included good procedures for systematic work, assessing risks before the work begun, training on patient transfer knowledge and follow-up on procedures, availability and good access to technical aids. Characteristic for these workplaces were a low rate of absenteeism, a participatory approach, knowledgeable managers and a good atmosphere.

Two further reports, a final report on the programme in 2015 and a White Paper in 2017, presented the progress and the achievements of the programme.

The 2015 final project report provides mainly information on the use of the evidence generated. For example, the report notes that the section on SWEA's website on women's work environment received over 5,000 visitors during the period from 2011 to 2014 and that, in 2014, approximately 150 press releases were published.

It summarised what were seen as some of the main features of the project including:

- continuous evaluation of the project by gender researchers from Mid Sweden university which added value to the program during a three years' period 2012-2014;
- created and published tools that will help inspectors as well as employers to better reveal and assess the risks of MSDs;
- developed a new method to allow comparison of the work environments and working conditions for female- and male-dominated activities;
- trained all inspectors in these new tools and all staff in gender awareness.

In September 2018, the short films produced as part of the project had received a total of 760 views on YouTube. The SWEA also attempted to obtain a benchmark measure of employers' knowledge, attitudes and behaviours towards women's work environment at the onset of the project in 2011.

A White Paper was published in 2017 to make the outcomes 'comprehensible, meaningful and manageable for future decisions and actions'. Summarising the findings of the knowledge compilations ,it listed a number of key conclusions:

- A gender perspective is required to reveal the structures that drive health/ill health.
- Women and men are in different sectors of the labour market subject to different conditions and work environment risks.
- Even where women and men work in the same sector or profession, they often do different things, which means different physical and mental stressors.
- The work environment is not gender equal; in female-coded sectors, the prerequisites for work and the work environment are worse. The risk of ill health is greater, as is the risk of leaving employment as a result of ill health or dissatisfaction with conditions at work.

The White Paper notes positive outcomes from the programme and that organisational changes have been introduced in several municipalities (e.g. Sundsvall) empowering employees and allowing them to plan their work within home care services. Several municipalities have also responded positively to the inspections. They are making use of lessons learned and promoting the sustainability of the initiative.

Concrete examples of municipalities are not provided, but the report notes that changes were observed in the number of employees per manager and that some municipalities are reviewing the different working conditions of different groups of workers. One of the key achievements is an increased awareness of gender issues among labour inspectors.

The White Paper notes that the project has generated valuable knowledge on the causes of increasing sick rates and what needs to be done. The results of the project have been disseminated at many levels and this has had a major impact in the media and among the social partners. In the workplace however, the new knowledge and inspections have not been generally reflected in action so far and greater changes are required to 'profoundly affect' working conditions and the work environment for both women and men.

# 6 Success factors and challenges

The success factors include using research evidence to develop new ways to design inspections with a gender perspective. This way of making visible working conditions and comparing the different work environments for female- and male-dominated activities, as well as reflecting about the impact of gender, were a valuable outcome of the project. Following the training of inspectors in these new tools and on adopting a gender perspective, their utility was demonstrated as part of the series of targeted inspections when 65 municipalities were inspected.

Using evidence based methods for risk assessment in order to identify risk for MSD created a greater awareness among work places and lead to various actions and sustainable improvements.

Providing information through a number of different dissemination channels (including the use of visual media such as YouTube) and challenging prejudices and traditional viewpoints by reaching out directly

through avenues such as seminars appears to have borne fruit, as shown by the actions reported by municipalities.

The challenges therefore appear primarily to have been a lack of knowledge ('ignorance') and inflexibility of thinking ('tradition'), especially within predominantly male-dominated sectors. The 2014 programme report notes that a lack of awareness of the issues and traditions regarding the division of tasks between men and women was the greatest challenge faced

However, as was concluded in the white paper, greater changes are needed in the workplace in terms of governance, management, organisation and allocation of resources in order to improve women's and men's working conditions and work environment. The prerequisites for change must be created at the organisational level, and in municipalities, at the political level.

Continuous evaluation of the programme during the three years' period 2012-2014 was and added value and an important success factor.

# 7 Other related projects

Since 2010, the SWEA has developed various information products on the prevention of work-related MSDs, including:

- an information project on the MSD risks associated with patient handling (and how to address them);
- an information website providing general information and practical information for all to encourage them
  to think about how they sit, move and work with the aim of preventing MSDs;
- a knowledge compilation on the benefits of physical activity and exercise in the prevention of MSDs;
- another knowledge compilation on the benefits of variety in work to reduce MSD risks;

In addition, a guide to assist relevant professionals (such as ergonomists) in identifying which risk assessment methods are suitable for particular types of task was developed by the Department for Occupational and Environmental Medicine at Uppsala University.

## 8 Policy issues

Sweden has a long history of gender equality, and the gender perspective is integrated in different areas, such as health care, social security, education and parental leave. This perspective is reflected in the Women's work environment programme, with its focus on gender inequalities in the workplace and the consequences for women's health.

The Swedish work environment policy is to contribute to a work environment that prevents ill health, accidents and people being excluded and to provide opportunities for development in the workplace for both women and men. This policy is reflected in the current strategy (described in section 4).

Traditionally, 'safety and health' in many countries has tended to place a focus on safety (accidents) more than health. The reasons for this are complex and beyond the scope of this case study. To some extent, accidents tend to occur in those industrial sectors that are male dominated (such as construction), leading inevitably (perhaps unconsciously) to a gender bias towards men.

The strong focus on gender issues reflected in this project can to some extent be seen as signalling a move away from this traditional focus on accidents towards a more health-oriented agenda. In those sectors where women predominate (such as social and health care) health issues such as MSDs come to the fore over accidents, leading to a change in emphasis. This emphasis is reinforced by the wider legal 'landscape' in Sweden in which MSD risks are explicitly addressed more widely than is the case in most (if not all) other EU countries. Indeed a need for such widening was frequently reflected in the investigations and focus groups held as part of this project.

The strong political support for the approach described here, including the renewal of projects and extension of the work to provide a continuity of focus, can be seen as a strong positive attribute of the work.

As well as these achievements stemming from immediate project activities and initiatives, one more farreaching policy-level outcome is understood to have followed from the work. As noted earlier, the project adopted the approach of encouraging gender awareness by focusing on those sectors where women predominated in the workforce. Building on this equality perspective, similar thinking is now being applied more widely with inclusive thinking including minority and vulnerable groups such as immigrants. Adopting a thinking similar to that of the present series of projects could, for example, see a focus on the risks in sectors associated with the temporary or part-time work more likely to be undertaken by such groups.

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#### 9 References and other resources

Selected publications from the Women's work environment programme (all published by the SWEA and available at www.av.se/inenglish/):

- Report 2013:7E National supervision 2012, Ergonomics in women's work environment
- Report 2013:09E Physical work, gender and health in working life
- Report 2014:03E Inspections of female and male dominated municipal activities, home care services and technical administration
- Report 2014:5E Inspections with focus on the risk assessment of patient transfer within the health care and social care sectors
- Brochure ADI 690 How can the work environment be better for both women and men?

#### Other related resources:

- Book, free to download as a PDF file: Production ergonomics: Designing work systems to support optimal human performance. Available at: https://www.ubiquitypress.com/site/books/10.5334/bbe/
- Kiadaliri A.A., Englund M. (2016). Mortality with musculoskeletal disorders as underlying cause in Sweden 1997-2013: a time trend aggregate level study. BMC Musculoskeletal Disorders 17: 163. DOI: https://doi.org/10.1186/s12891-016-1024-9.
- Sverke M., Falkenberg H., Kecklund G., Magnusson Hanson L., Lindfors P. (2017) Women and men and their working conditions: The importance of organizational and psychosocial factors for work-related and health-related outcomes. Swedish Work Environment Authority, Stockholm.
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- SWEA (Arbetsmiljöverket) (2020) Gender equality section on Swedish Work Environment Authority's website: <a href="https://www.av.se/en/work-environment-work-and-inspections/work-with-the-work-environment/gender-equality-in-the-work-environment/#5">https://www.av.se/en/work-environment-work-environment-work-environment/gender-equality-in-the-work-environment/#5</a>
- Vänje A. (2013) Under the magnifying glass— Gender perspective in work environment and *work organisation*. Swedish Work Environment Authority, Stockholm.
- Wiitavaara B., Fahlström M., Djupsjöbacka M. (2017). Prevalence, diagnostics and management of musculoskeletal disorders in primary health care in Sweden an investigation of 2000 randomly selected patient records. *Journal of Evaluation in Clinical Practice* 23: 325-332.

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