

Give musculoskeletal health to children and young workers

20-21 March 2019, Hotel Carlton, Plaza Federico Moyua, 2 – Bilbao

Perspective 3: Musculoskeletal health and young people / with a research dimension

INTRODUCTION

The seminar brought together four perspectives, mixing research, policy, and practice to explore the scope and variation in the theme of 'MSD prevention among school children / young workers':

Perspective 1: Mainstreaming OSH into education – with a practical dimension

Perspective 2: Ergonomics – with a policy dimension

Perspective 3: Musculoskeletal health and young people – with a research dimension

Perspective 4: Body self-perception – with a communications dimension

All attendees participated in expert-led discussions in four small groups and covered the four different perspectives. The groups did not discuss the same questions, as through the group discussions, the experts led the meeting discussion, funnelling down in specificity towards the preparation of an outcome. Each group spent one hour with each expert.

For more information about the practicalities and the dynamics of the workshop, please consult the agenda of the seminar and the PPT called "background information (ahead of the seminar)".

In this document the summary of the perspective 3 is presented. The discussions questions were:

- What does the research say in terms of risk factors for MSDs (exposure of young workers)?
- What do we know of the impact of musculoskeletal health in adolescent on work participation in adulthood?
- How can the transition from education to work be managed without putting in jeopardy the musculoskeletal health of young people?

Following these discussions with the different groups, with the last one the research questions that need to be answered in the future were identified.

What does the research say in terms of risk factors for MSDs?

- First of all, who do we mean by "young people; who are they? For the World Health Organisation people from 10 to 24 years old. For our purposes, people from 15 to 24 years old. They are a diverse group (not a homogeneous one). There is evidence that MSDs in adolescence increases or is associated with sickness absence and disability in adults.
- Why are they at increased risk?
 - They are in transition from education to work. There is often a gap between what they learned in the school about safe and healthy work practices and work. They need to adapt (to a new environment (the workplace, (new work) habits)
 - Lack of preparedness and experience
 - Lack of awareness
 - Risk perception of young people is different

That's why early intervention targeting the transition period from education to work is key. The transition is associated with an increase in MSDs problems.

- What are main risk factors that can lead to the development of MSDs)?
 - Risks related to the occupation / job
 - Young people often get the “dirty” / heavy jobs / tasks.
 - Bad communication.
 - Fear of losing the job.
 - Risk related to bad role models / bad mentors.
 - Changing nature of work, increase in temporary and precarious jobs, often occupied by young people without appropriate induction and training.
 - Higher psychosocial demands at work and in general (at society level)
 - Example of a good initiative related to this issue: LOCHER. An approach for students and apprentices to identify health and safety risks in their area of study; learn about them and showcase how they can protect their health and safety; and take that experience into the world of work. More information available at: <https://www.safetygroupsuk.org.uk/campaigns/locher/>
 - Social / cultural related risks
 - Digitalisation of society (among other issues: use (intensive) of ICT devices).
 - Pain versus discomfort.
 - Educational level of parents (low body culture of parents leading to unhealthy habits: sedentary live, obesity, etc.).
 - Health inequality.
 - Obesity / nutrition.
 - Stress.
 - Increased control band (more influence from the group of peers (over family, school).
 - Working / school environment.
 - Educational related risks
 - A primary school system where the emphasis is on the academic aspects, the learning environment and organisation does not support a healthy lifestyle, e.g. physical activity is not integrated in the educational process (not using their bodies, only the brains).
 - Lack of motivation for teachers (to introduce / to teach healthy practices and safety topic on top of all the others items in the curricula.
 - Lack of enough common health messages for the pupils / students.
 - Not enough attitude and motivation among pupils and students to consider good health practices.
 - Heavy backpacks and lack of physical exercise during the school day.
 - Individual risks
 - Sedentary lifestyle / or physical inactivity
 - “Powerfulness perception” at work (“superman” attitude (overestimation of their physical abilities / capabilities); “not asking for help” attitude, “make your proof at work” attitude).
 - Bad postures and repetitive movements in leisure time (related to the use of mobile phones, tablets, computers, ...);

There was a consensus (during the discussions) that usually MSDs result from a combination of these risk factors (mentioned above). The promotion of a good musculoskeletal health or the prevention of MSDs is a matter that concerns both the Public Health and the Occupational Health sectors.

Health promotion factors

The second group continued the work of the previous group on the risk factors but changed the direction of the discussion. There was an opposition on naming particular groups of young workers as vulnerable and instead the group focused on the health promotion factors. Some of them are identical to the already identified above but listed as an opportunity instead of a threat.

Some of the main Health Promotion factors:

- Role model – the young people in transition are very susceptible to role models which can be both negative and positive. Therefore the teacher and the employer as a good role model is an essential factor.

- Use media / celebrities (for example) for role models promoting health.
- Self-esteem and trust – it is important that the young people have a good confidence and self-esteem and rely on themselves while also trusting the others' good will.
 - To teach courage to speak-up for safe behaviours.
- Awareness and information – during the educational process the young man/woman should be informed and aware of the OSH risks related to her/his future employment. That information process should continue on the workplace getting beyond the legislative requirements;
 - Knowledge about occupational hazards and how to eliminate / reduce them before entering professional life.
 - Knowledge / training about good postures.
- A good school / work environment
 - Technology in the workplace can help reduce manual handling.
 - Healthy workplace design.
 - Safety and Health work processes.

Again there was a strong connection pointed out between the educational institutions and the workplace as well as between the teacher and the employer as main influencers.

Improve the transition process in order to avoid / reduce exposure to the main risk factors

The third group discussed how to organise better the transition process in order to avoid some of the main risk factors. Possible interventions were listed out as contributing towards prevention, some of them could be considered as “theoretical” and some of them were coming from the “practice” of the participants:

- Institutional/Policy measures: introduction of good legislation; ensuring safety and health conditions; proper training for young workers; dedicated inspections on the work conditions and training of young employees; target inspections on ‘dirty jobs’; and; strict safety requirements for seasonal jobs with no or insufficient training.
- Educational measures: information/preparation for the health risks on the workplace during the education process through partnership with companies; job information days at schools; introduction of dual education - practices; new ways of communicating OSH information – using games, proactive learning.
- Workplace measures: economic incentives for employers combined with increased control; showing the benefits of a healthy workforce; mentoring; educating the mentors.

How can the transition from education to work be managed without putting in jeopardy the musculoskeletal health of young people?

- Employment agencies giving information on the good general OSH practices.
- Organisation of “job information days” in some schools with presentation of the actual work and general OSH practices.
- Acquiring practical experience in different occupations.
- Return on investment must be A+. Communication to businesses that investment in OSH pays back.
- Teachers have to be fully aware that they teach future employers and employees too!
- Educational campaigns / weeks at school about workplace risks (video, games, discussions)
- Improve safety and health culture at home: working with local communities.
- For the new one: training at the workplace at the beginning; explain the many rules (what is allowed and what is not); giving the young employee a mentor; learning of the risks and the preventive and protective measures.
- To change the attitude in relation with health and safety risks at the workplace. These are different in the different sectors, so it is not possible to be trained for all the risks.

- Educational seminars for employers (all) having young workers in early employment and high risks jobs
- Procedures and documentation available to employers employing young workers dealing with “how to ..”, “why ...”, “when ..”Preparation of simple guidelines / checklists for companies employment newcomers on the work.
- Ensuring mentoring for young workers.

Research questions / areas that need to be addressed

The fourth group had the challenge to figure out how to formulate practical research areas that would benefit future legislation and improved transition process.

General and horizontal issues:

- Safety and Health topic should be mainstreamed into education.
- Some ergonomics knowledge should be integrated in the relevant high education disciplines like architecture, engineering and design.
- OSH training focused on safety.
- Business case for good OSH management.
- Challenge: long-term development of MSDs

The identified research topics were:

- Learning from bad practices versus learning from good practices.
- Would delivery of training on case studies / good practice focusing on ergonomics help inform young people when they start working in the future?
- Would the delivery of ergonomics training to young people have a positive impact on improving the musculoskeletal health of future workers?
- What is the “healthy behaviour” that you want to teach young workers / students?
- What are the determinants of the (healthy) behaviour? (why do they choose to work in a certain way)
- How can we influence the determinants of the target behaviour (in an effective way)? Who can influence this?
- Effect of mentoring on the workplace – examining the effect of introduction of good practices through mentoring.
- Effect of case study presentation – information from people with diagnosed MSDs. Does the presence of someone with an MSD in a class increase adherence to good OSH?
- To identify the importance of psychosocial factors on MSDs and Prevention.
- To study – in terms of cost-benefits analysis – if investing money on OSH training at school (all levels of education) can reduce occupational illness and accidents.
- To carry out cost benefit analyses of the investment in ergonomics for the workers.
- Is there any link (correlation) between injuries of young workers and MSDs?
- Is there any link (correlation) between knowledge (education) of ergonomics and frequency of MSDs (at young workers?)
- To carry out parallel comparison – classic OSH training in vocational education compared with effect of innovative training methods.
- To analyse the effects of the new technologies on the musculoskeletal health of children / young workers (intensive use of ICT devices, bad body postures, etc)?
- To assess if technology (tablets, smartphones, ...) is a help or a hindrance in the classroom?
- To carry out a survey among young workers on practical application of the theoretical knowledge (safety practices). What is the perception of differences between theory knowledge (about OSH, ergonomics) and practice they met at work?
- What is the awareness perceptions, attitudes of young people entering the labour market through different paths:
 - Vocational educations
 - Drop-outs (without studies)

Combining quantitative with qualitative research.

- To carry out sector based MSD research – finding more risky sectors.
- To compare two groups of trainees:

Group A: having undergone vocational training based on a partnership between school and some enterprise: “learning health and safety by doing”

Group B: Traditional vocational training “simple knowledge transfer during courses”.

Outcomes to measure after one year in employment:

- General health perception
 - Self-efficacy in management of his / her own health
 - Musculoskeletal complaints using body diagrams
 - Incidents / accidents at work
- To carry out a survey among employers. What are the qualities they expect from young workers?
 - Productivity
 - Competence and quality of work
 - Health and safety culture.

Is the last component an added-value?