Preventing musculoskeletal disorders in hairdressers – experiences of collaborating with the private sector to develop apps

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Part of a programme to enable people to have full and productive working lives through promoting musculoskeletal health and preventing work loss due to musculoskeletal problems
Musculoskeletal conditions are the greatest cause of disability (YLDs) across the EU and impact at all ages.
Musculoskeletal Health and Work

Work causes or aggravates musculoskeletal conditions (work-related MSDs)
- eg manual handling and bad postures causes or worsens back pain
- repetitive work related to upper limb problems

Musculoskeletal conditions limit work capacity
- eg rheumatoid arthritis affects many joints and often limits or prevents work
Musculoskeletal conditions

- Most of us get aches and pains or stiffness at some time, particularly as we get older. Some of us get more serious problems.
- Some are short lived, often following an injury. Others can be lifelong.
- There is a wide variety of reasons including work-related factors.

- Neck pain
- Shoulder pain
- Back pain
- Sciatica
- Tennis elbow
- Carpal Tunnel Syndrome
- Tendinitis
- Osteoarthritis
- Osteoporosis
- Gout
- Rheumatoid Arthritis
Preventing work loss due to MSK problems

- Preventing workloss due to MSK problems goes beyond addressing the risks of injury in the workplace and towards promoting health and wellbeing in the worker and the workplace. Employers need to take a proactive approach to preventing an MSK problems occurring and preventing work loss if a problem arises.

- Workers need to be empowered to prevent MSK problems and to manage any existing MSK that impacts on work so they can participate in work even with an ongoing MSK problem.
Support employers to implement best practices

Musculoskeletal health in the workplace: a guide for employers

Click here to read the toolkit
MSK Aware

Key steps for good MSK Health in the Workplace

• Recognise that MSK health is important so we can all do the things we want to do at work and at home. It is everyone’s responsibility to look after and protect. An open, positive culture that cares about worker wellbeing should be central to any employer’s approach to MSK problems to enable problems and solutions to be found

  ➢ look after MSK health at home & at work
  ➢ reduce risks in the workplace
  ➢ act early if a MSK problem arises
  ➢ manage MSK problems in the workplace to enable retention of the workforce

Codeveloped by MSK Aware, Public Health England, Health and Safety Executive, experts in MSK workplace health, employers and employees
What it means for individuals

**Empowering people to help themselves**
within a safe and healthy workplace

- Look after your MSK health by committing to a healthy lifestyle in and out of the workplace - have a plan, set goals and take action.
- Recognise and reduce your risks in the workplace and in your work by participating in health & safety training and using equipment safely.
- Act early if you experience pain or symptoms. Know where to access help and support.
PROBLEM
Hairdressers and MSD

- Almost 40% hairdressers report work-related arm, neck and shoulder complaints and 30% for back complaints.
- High prevalence is caused by (a combination of) working postures and repetitive and sometimes forceful movements of the hands and fingers.
- Hairdressers work for prolonged periods with elevated arms, bent back and bent head.
- In washing, haircutting and styling tasks, extreme positions of the forearm and wrists occur frequently, increasing the risk of tendon-related disorders, e.g. tennis elbow or carpal tunnel syndrome.
- Lack of ergonomically designed workplaces and equipment (hairdryers, scissors) contributes to these risks.
Hairdressing sector

- There are approximately 355,000 hairdressing companies and 400,000 hair salons in Europe.
- The hairdressing sector is a typical SME sector, and most salons are independent enterprises. A small part of the sector (about 10-15%) consists of large salon chains. In some countries – in particular the Netherlands, Switzerland and Denmark – a substantial number of hairdressers carry out their business at home or in a dwelling.
- About 40% of hairdressers work part-time. The employee turnover is relatively high.
- The number of employees in the sector is estimated to be around 940,000 in Europe but 7,000,000 worldwide.
Enable hairdressers to
- follow an MSK healthy lifestyle
- avoid risks related to their work
- manage MSK problems if they arise
- monitor their MSK health
Recommendations and tools exist

Example risk assessment for a hairdressing salon

Mostly focuses on risks of chemicals to skin but.....

| Standing for long periods | Staff may suffer musculoskeletal injuries, eg back pain, neck or shoulder injuries and pain or discomfort in feet and legs. | Client chairs are fully adjustable. | Sinks designed to minimise twisting. | Wheeled stools provided for staff to use while cutting. | Owner to look at rota to confirm all staff take regular breaks. | Owner to check conditions suitable to individual circumstances, eg pregnant workers, and adjust to suit person. |

Equipmen t that meets the need

Good working practices
L’Oreal Professionnel

• Recognised that MSDs are a major problem among hairdressers

• Developed a training programme for hairdressers to prevent MSDs
  – Warming up
  – Best practices
  – Stretches

• Delivered in 13 countries through their trainers
L’Oreal Professionnel

• Wished to enable wide access to the programme through developing an App and partnering with the Global Alliance for Musculoskeletal Health to ensure the quality of the programme and for salons to be recognised if implemented

• Programme reviewed by experts with feedback from hairdressers
Musculoskeletal Disorders (MSDs) represent 75% of professional occupational disorders and affect muscles, tendons, nerves and joints. MSDs are responsible for:
- approximately 3 out of 4 professional diseases among hairdressers
- work loss due to absenteeism secondary to pain and limited function
- pre-mature retirement due to chronic pain and activity limitation

For the first time ever, L’Oréal Professionnel has joined forces with the Global Alliance for Musculoskeletal Health (G-Musc), an organization that brings together experts from all continents and all health disciplines, including patients, to promote musculoskeletal health to keep people moving and free of pain. The Global Alliance actively works with the World Health Organization to raise the priority for and awareness of MSDs and their impact on people in their work and daily lives. G-MUSC has collaborated with L’Oréal Professionnel to develop this programme for hairdressers to promote musculoskeletal health and help prevent MSDs.

L’Oréal Professionnel with you against MSDs is a daily programme consisting of three sets of 5 minute exercises to warm up your muscles and joints, to encourage correct movement and posture, and to reduce muscle tension through targeted stretches.

15’ PER DAY TO FIGHT MSDs

In all L’Oréal Professionnel trainings

5 minutes to warm-up your body and to prepare it for activity
5 minutes to practice good posture
5 Minutes of stretching to relax and tone your muscles

....and now in Your Pocket
15’ per day to fight against MSDs

Codeveloped by the Global Alliance for Musculoskeletal Health* and L’Oréal Professionnel, this program helps fight against Musculoskeletal Disorders (MSDs). *GMUSC is supported by UN and works with WHO to promote musculoskeletal health. It is represented in 96 countries.
5’ WARM UP
5’ POSTURES
5’ STRETCHING
Always warm up before starting physical activity to prepare your muscles and joints. Warm up from head to toes.

- **Full body**: 5°
- **Body**: 60°
- **Neck & upper back**: 30°
- **Shoulders**: 30°
- **Elbows & forearms**: 30°
- **Wrists & hands**: 30°
- **Low back**

Breathe slowly
Turn your head from right to left
Tilt your head right and left
Postures

Identify bad postures and practice the right postures everyday

- Shampoo
  Neck and back
- Shampoo
  Arms and wrists
- Shampoo
  Neck, back and shoulders
- Technical service
  Neck, back and arms
- Cut

• Information relates to specific tasks
Postures

BAD POSTURE

GOOD POSTURE

1. Adjust chair to get the best position
2. Sit down to get the best position
3. Keep back straight

No chair? Ensure you warm up and stretch
Postures

SHAMPOO

1. Keep back straight
2. Lean into basin
3. Keep elbows low
Postures

**Styling**
Back, shoulders, wrists

**BAD POSTURE**

**GOOD POSTURE**

1. Alter the height of the chair
2. Turn the chair to position yourself in front of your client
3. Keep your elbows low

STYLING
Stretches

Breathe normally when stretching and drink regularly to keep hydrated. Repeat on opposite side except for back.

- Full body
- Neck
- Back
- Low back
- Wrist (up) and forearms
- Wrist (hand down) and forearms
- Wrists (hand down) and forearms
- Wrists (hand up) and forearms
- Hands
- Hands
- Legs (thighs)
- Legs (calves)
- Ankles and feet (calf and hamstring)
Stretches

Ankles and feet
Calf and hamstring

00:24
Bend back knee and straighten front leg.
Back foot faces forward.
Keep front leg straight, toes up.
Push heel of back leg into floor.
Hold on if necessary.
Hold for 30 seconds while breathing gently.
Repeat on opposite side.

00:21
Stretch arm in front with thumb upwards (hitchhikers position).
Bend your thumb into your palm and close your fingers around thumb.
Bend the wrist down towards floor.
Hold for 30 seconds while breathing gently.
Repeat on each side.

00:24
Bring right knee up to left shoulder.
Clasp right knee with left hand and twist back and neck to the right.
Hold for 30 seconds while breathing gently.
Repeat on opposite side.

Wrist
Hand down) and forearm

00:22
Bend wrist moving hand downwards (palm inwards) keeping arm straight.
Support the flexed hand with the other hand.
Hold for 30 seconds while breathing gently.
Repeat on each side.

With practical explanations
Pain

Invited to score pains weekly by push notification.
Impact of pain

- Weekly push notification to score impact on
  - Work
  - Sleep
  - Everyday activities
Coach

Recommendations made based on pain scores
Coach

- Follow-up and badges to encourage ongoing use
15’ Coach

- Launched October 2016
- iPhone and Android versions
- 8 languages - English, French, German, Spanish, Portuguese, Russian, Chinese and Brazilian
Trend of First time Users

Growth in new users between 1st December 2016 and the 14th December 2017.

Analysis period 2 Dec 2016 to 14 Dec 2017
The App has been used by over **14,500 users**, with 972 joining in the 71 days between 4th October and 14th December. Over 80% of users are 44 years or younger. 766 age profiles have been entered by L’Oréal users.

Most users (55%) are either stylist or general hairdressers; a few of these roles have been entered by L’Oréal users.
14,237 pain records. Neck pain is the most common MSD followed by Lower Back and shoulders; these are also the worst affected areas in terms of blocking and dull pain.

10,975 users recorded the impact of pain. Pain impacts daily life, work and sleep, almost in equal measure.

Analysis period 2 Dec 2016 to 14 Dec 2017
App Usage

77,632 screen hits from 2nd December 2016 to 14th December 2017. Most users are using the warm-up advice followed by posture and then stretching.

Analysis period 2 Dec 2016 to 14 Dec 2017
Warm-ups and Stretching per week

- 22,491 users recorded warm-up exercises
- 8,506 users reported stretching at least once per week.

Warm-ups and stretches most commonly once or 5-times a week

Analysis period 2 Dec 2016 to 14 Dec 2017
Users are awarded badges to reflect their use of the App. Novice is the base level, then Advanced followed by Expert. Total badges awarded 7,102. Most are at Novice level.

Analysis period 2 Dec 2016 to 14 Dec 2017
Few users updating their pain records on a regular basis. 243 users have updated their pain records at least twice but most users (3605) update them only once.
Outcomes

- Objectives delivered
  - Enable hairdressers to
    - follow an MSK healthy lifestyle
    - avoid risks related to their work
    - manage MSK problems if they arise
    - monitor their MSK health
- Initial uptake good
- Positive response to concept
- No long term follow up to establish if health gain (confidentiality / GDPR / funding issues)
- Sustainability a challenge despite notifications and badges
- Motivating users
  - personal benefit v research / altruism
  - gamefication or more individual feedback
Challenges of working with commercial sector

• Different interests / motives / ROI
  – For own workforce (productivity)
  – For customers / consumers (sales)

• Role of NGO - partnership supporting the same goals v co-developing a product

• Conflicts of interest, control of content, evidence-base, commercialization of initiative, use and promotion of link with NGO.

• Ownership (IP)

• Changing management with different objectives and priorities
Learning points

• Apps are a valuable way of enabling individuals to support their MSK health within and outside the workplace
• Content relevant to audience is key – co-development essential
• Needs to show a clear short-term benefit to the user
• Confidentiality of data
MSK Aware

A person centred approach to helping people manage their MSK health

Changing culture and behaviour to support MSK health and prevent workloss

Supporting employers and employees to prevent and manage MSK conditions

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