

PARTICIPATORY WORKSHOPS WITH FEMALE FOOD PREPARATION WORKERS TO FIND SOLUTIONS TO MUSCULOSKELETAL PROBLEMS

General information

Country: Finland

Sector: Hotels and catering

Type of organisation: Multiple public sector canteens or kitchens

Size of organisation: Medium

Location: Urban

Job/tasks: Various tasks related to food preparation

Workplace and task characteristics: Awkward movements, postures and loads, and repetitive movements involved in food preparation tasks. At the beginning of the study, 70% of the workers reported that they had suffered from pain in neck and shoulders within the previous three months.

Workplace participation measures:

- Pre-intervention workshops to provide training in analysing tasks and identifying hazards.
- Onsite analysis of work problems by the workers.
- Intervention workshops to examine solutions.
- Risk analysis by workers (following training).
- Questionnaires to assess stress.

The action

Background

The Finnish Institute of Occupational Health decided to carry out a study to see if ergonomic improvements based on worker participation could decrease the high incidence of musculoskeletal disorders (MSDs) and related sick leave among this group of workers. The study was carried out in kitchens because the work exposes workers to various types of physical workloads. Finland has a strong tradition of worker participation in occupational safety and health (Perttula, 2013), where there is strong cooperation between workers and management.

Participants and stakeholders

The study involved 119 municipal kitchens and 504 mainly female workers. The project was carried out by an external expert from the Finnish Institute of Occupational Health. Only half the kitchens took part in the intervention; the other half continued to carry out their work in the usual way.

Participatory approaches, methods and tools

The workers themselves identified hazards, analysed designed solutions to the problems and implemented changes.

Pre-intervention workshops and activities

Before the start of the intervention, the workers participated in two workshops and carried out activities in the intervening time. Both workshops lasted five hours. During the workshops, the workers were taught to analyse their work with the aid of an external expert.

During the first workshop, they chose between one and four work tasks that caused most strain to the workers. Analysis of these work tasks started.

Workers continued analysing their work tasks during the one-month period between the two workshops. At this period, the researcher (external expert) visited each kitchen once and contacted the kitchens once by telephone to ensure that the task was understood and that workers were able to perform the analysis.

The second workshop consisted of continuing the analysis, choosing the development points to be carried out in practice and developing a timetable.

Intervention

The intervention began after the second workshop and lasted for 9-12 months. The workers filled in questionnaires every three months during this time.

Four more workshops were held (one every fifth week). The workshops were held in different kitchens each time, giving the workers the opportunity to familiarise themselves with other kitchens. In each workshop, progress on the development was discussed and different solutions to the problems were examined.

The workers estimated the stress levels associated with their work tasks and frequency and duration of such tasks through the questionnaire. They answered questions on relevant psychosocial factors every third month. The risk factors were observed at the beginning of the study by the researchers.

The study progress was guided and supervised by a control group consisting of financiers, union representatives and officials responsible for catering safety and health in the cities concerned.

What was achieved

In the intervention kitchens, 402 changes were made. At the same period, 80 changes were made in the kitchens that did not take part in the intervention. The workers' experience was that the musculoskeletal symptoms had decreased because of the changes in ergonomics. It is possible that at the beginning of the intervention, the workers became more conscious of ergonomics and probably also began to pay more attention to their MSDs.

Case extracts

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Four workshops were held (one every fifth week) in different kitchens each time, giving the workers opportunities to familiarise themselves with other kitchens. In each workshop, progress on the development was discussed, and different solutions to the problems were examined and compared. Workers considered this to be a critical success factor.

Analysis

Facilitators

- The best results can be obtained by cooperation between workers and management.
- Workers considered that being able to learn from the practices in other kitchens was a success factor.
- Participating in the workshops improved the cooperation both in workers' own kitchens and between different kitchens.
- The intervention involved both analysis of physical risks and self-assessment of worker stress.

Transferability

This type of intervention can be transferred to other individual workplaces where the need to improve ergonomics is an issue. Similar methods for improving ergonomics could be carried out in various workplaces, beginning with the questionnaire and its analysis and workshops. However, an external specialist is needed to guide the process.

References and further information

The information on this case was compiled by EU-OSHA. No additional written material is available.

Perttula, P. (2013). *OSHWiki: Worker participation – Finland*. Retrieved 30 June 2021, from https://oshwiki.eu/wiki/Worker_participation_-_Finland

Riihimäki, H., (2008) *Ergonomiaintervention vaikuttavuus -satunnaistettu kontrolloitu tutkimus*. Työterveyslaitos, Helsinki, Joulukuu. Available at: <https://docplayer.fi/6307821-Ergonomiaintervention-vaikuttavuus-satunnaistettu-kontrolloitu-tutkimus.html>