## Promotion of work ability among cleaners

Kaukiainen Anneli<sup>A</sup>, Lappalainen Jorma<sup>A</sup>, Nygård Clas-Håkan<sup>B</sup>, Oksa Panu<sup>A</sup>, Roto Pekka<sup>A</sup>

The work is experienced as heavy, and cleaners suffer illnesses that are considered to be caused by physically demanding work, This relationship is also shown by the numbers of cleaners that apply for early retirement. Studies have indicated that cleaners have poor control of their muscles and therefore often use poor work postures. The objective of this investigation was to gain experience with possibilities to realize activities to promote health by maintaining work ability for use in occupational health care. An attempt was also made to determine the effect of a physical activity program on the work ability and functional capacity of cleaners and to study the effect of equipment changes and guidance on the work load of cleaners in the construction industry. Altogether 45 female cleaners between the ages of 22 and 61 years participated in the study. They were divided into physical activity, a control groupand an altered work group.

A health examination and interview by an occupational health nurse, a questionnaire and measurements of physical functional capacity were the methods used for each group. In addition, the OWAS method and heart rate measurements were used for the altered work group. During a period of 10 weeks the physical activity groups met once a week during the workday to exercise. The forms of exercise used were walking and introduction to muscular conditioning exercises. In addition the participants were given instructions for effective leisure-time activity. The guidance given to the altered work group on how to promote their health by means to decrease their occupational work load through changes in equipment and less straining work postures. This period lasted five weeks.

The results indicated that short periods of physical activity intervention can be used to promote health and increase work ability and functional capacity. The muscular condition of both physical activity groups improved significantly. Slight changes occurred in the functional capacity of the respiratory and circulatory systems during the follow-up. Perceived work ability also improved significantly during the intervention. As a result of altering work conditions, the use of bent or twisted postures decreased, as did postures with the arms raised. By using equipment with adjustable handles, the cleaners were able to influence their work ability, since difficult work postures decreased and the perceived tiring of the neck and shoulder regions decreased.

## References

Dehlin, O, Berg, S, Andersson, G B J & Grimby, G: Effect of physical training and ergonomic counselling on the psychological perception of work and on the subjective assessment of low-back insufficiency. Scand J Rehabil Med 13 (1981); 1-9.

Nygård, C-H., Luopajärvi, T. & Ilmarinen, J.: Musculosceletal capacity and its changes among aging municipal employees in different work categories. Scand J Work Environ Health 1991 a. Suppl 1: 110-7.

<sup>&</sup>lt;sup>A</sup> Tampere Regional Institute of Occupational Health PO BOX 486. FIN-33101 Tampere

<sup>&</sup>lt;sup>B</sup> University of Tampere, Tampere School of Public Health, PO BOX 607, FIN-33101 Tampere