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Worksite physical activity - a useful, but not sufficient action for promoting work-related health and productivity

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Worksite physical activity — a useful, but not sufficient action for promoting work-related health and productivity

Physical activity programs have become common at worksites during the last few decades. It is difficult to find a health promotion program at a worksite without an option to join organized physical activity. In this issue of the *Scandinavian Journal of Work, Environment & Health,* a systematic review is published on the effectiveness of physical activity programs at worksites with respect to work-related outcomes (1). Although the earlier literature on the effects of physical activity on health is extensive, no earlier reviews seem to exist in which the effect of physical activity programs at work on work-related outcomes has been studied simultaneously with the methodological quality of the individual studies.

Considering the accepted role of physical activity programs at worksites, it is surprising that the review found only limited evidence for an effect on absenteeism from work, inconclusive evidence for an effect on job satisfaction, job stress and employee turnover, and no evidence for an effect on productivity. The rather upsetting result seems to be due to the lack of randomized control trials — giving always the highest rating for evidence — and shortcomings or a lack of the description of randomization, intention-to-treat analysis, inclusion criteria, compliance, methodological issues, and the like. The limited evidence for an effect of physical activity programs at worksites shows that there is a gap between the "scientific" and "practical" truth. It is not probable that any practical guidebook on worksite health promotion would state that there is "no evidence" that worksite physical exercise influences effectiveness and productivity at work. However, this is the case in strict scientific terms. The conclusion, therefore, offers a challenge to the designers of new studies on this topic.

Luckily, the review found some evidence that physical activity is related to lower absenteeism. Considering the expanding evidence on the strong beneficial effects of physical exercise on health, any other result would have been improbable. According to an extensive consensus report of the United States Department of Health and Human Services (2), physical activity has numerous beneficial effects on the cardiovascular and musculoskeletal systems, and the benefits on the functioning of the metabolic, endocrine, and immune systems are considerable. There is sufficient evidence that physical activity is associated with a decrease in the risk of cardiovascular disease, mortality, colon cancer, and noninsulindependent diabetes mellitus (2). Furthermore, physical activity appears to relieve symptoms of depression and anxiety and improve employees' psychological health, sleep, and alertness (2, 3, 4).

In another paper of this issue (5), a randomized controlled trial evaluated the effectiveness of a worksite exercise program with respect to perceived work ability and sick leaves. Since the participants did physically demanding laundry work, intervention involving physical resources was selected. The effects on work ability were, however, modest, and no effects were found on job satisfaction or sick leaves. Considering the high expectations of the employees and the company, the very minor positive results with respect to work ability must have been disappointing. Work ability is, however, an extremely wide concept that includes such items as the number of current diseases, work impairment, sick leaves, and even mental resources (6). Exercise once a week — without other action — will probably not affect such a large entity. However, as the authors point out, the idea behind the intervention was to promote self-directed physical activity. Actions concerning organizational and professional competence and improvements in the work environment are probably needed simultaneously to produce a more substantial impact on work ability. If conducted well, worksite physical exercise can still be the initiator and trick through which to start face-to-face discussions and prepare the occupational atmosphere for open-type

discussions and development. On the individual level, even the perceived effect on well-being can be useful. Physical activity has a positive effect on self-confidence and the perception of balance between word demands and resources (3). The ability to cope well with stress is a handy tool in current worklife.

References

- 1. Proper K, Staal B, Hildebrandt V, van der Beek P, Mechelen W. Effectiveness of worksite physical-activity programs with respect to work-related outcomes. Scand J Work Environ Health 2002;2:75–84.
- US Department of Health and Human Services. Physical activity and health: a report of the Surgeon General. Atlanta, GA: US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, 1996.
- 3. Griffiths A. Employee exercise programmes: organisational and individual perspectives. In: Kerr J, Griffiths A, Cox T, editors. Workplace health: employee fitness and exercise. London: Taylor & Francis Ltd, 1996:1–28.
- 4. Härmä M. Exercise, shiftwork and sleep. In: Kerr J, Griffiths A, Cox T, editors. Workplace health: employee fitness and exercise. London: Taylor & Francis Ltd, 1996:129–44.
- 5. Nurminen E, Malmivaara A, Ilmarinen J, Ylöstalo P, Mutanen P, Ahonen G, Aro T. Effectiveness of a worksite exercise program with respect to perceived work ability and sick leaves among women with physical work. Scand J Work Environ Health 2002;2:85–93.
- Ilmarinen J. Ageing workers in the European Union status and the promotion of work ability, employability and employment. Helsinki: Finnish Institute of Occupational health, Ministry of Social Affairs and health, Ministry of Labour, 1999.

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