

Healthier and happier animal technicians - happier animals

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Introduction

Rehabilitation is directed towards persons whose working capacity is compromised by health problems. Early rehabilitation is designed to prevent the development of such conditions.

Work in the animal house, being mainly manual, is physically strenuous. This often results in diseases of the musculoskeletal system and connective tissue, and in symptoms connected with these (*Nieminen & Puumalainen 1992*).

Economical saving schedules often result in increase of work load and rush, leading to stress. These factors can lead to long-term absenteeisms, and as the average age of animal technicians is increasing, it also contributes to early retirement which has increased recently. Thus the need for early rehabilitation among animal technicians is very important.

The aim of the programme was: (1) to motivate animal technicians to take care of their own health by means of free-time sport and exercise and proper knowledge on ergonomics at work, (2) to recognise symptoms of stress and deal with them, (3) to recognise their own mode of action and to be able to avoid tension by using means of relaxation, and (4) to help enhance collaboration between workers and between workers and their superior and improve the ability to solve problems.

Early rehabilitation programme

The programme was set up in the Central Animal Laboratory of the Turku University in collaboration with the University Occupational Health Services. The planning of the programme was completed by a working group consisting of the occupational health nurse, animal technicians and the laboratory head, and participation was voluntary. Since motivational factors influence active participation the programme was planned to suit the requirements of the personnel.

The laboratory head and 12/13 animal technicians participated. Eleven participants were female and two were male (Mean age 40, range 22-58). One technician was close to retirement and therefore the programme was not necessary for her. Neither of the two male workers followed through to the end as they felt uncomfortable in an otherwise female group. The programme was funded by the State Treasury. It started in August 1994 and was completed in May 1995.

Methods

The basic fitness of the group was initially assessed by the individual 2-km- walking test developed by The UKK Institute for Health Promotion Tampere. To study the possibility of any improvement there was a follow-up walking test immediately after the programme, and a final walking test was conducted half a year later. The fitness index was then calculated with measurements taken after the walk using weight, height and age of the walkers and time and pulse measured immediately after the walk (*Oja et al 1991*). Results were given to each worker, also recommending a suitable fitness programme to follow in their free time. The walking test was followed by physical exercise groups lead by a physiotherapist. (10 x 1 h/week). The aim here was to help achieve good muscular balance and increase physical capacity. They consisted of muscle stretching (15 min), muscular strength training exercises and aerobics (25 min), with relaxation exercises (15 min) to end each session.

There were also psychological discussions lead by a psychologist. (5x 2 hrs).

The function of the group sessions was general discussion on the following: stress, recognising symptoms of stress and ways to control it, how to improve the working environment and collaboration between employees and their superior and the

importance of group work to increase motivation. A 2 hour lecture on ergonomics was given by a physiotherapist, before which she conducted a work place survey to assess the main problems concerning health risks and disorders. Counseling was then given on ergonomic changes and adjustments in working conditions. The availability of equipment to help ease the physical work load was also discussed.

Results and Discussion

In a study carried out by the Occupational Health Institute, it was found that the head of the department has the strongest effect on the working capacity of, especially the older members of staff and it was thus important to include the laboratory head in this programme (Lindberg 1995).

After completion of the programme, all of the workers started considering permanent ways of functioning in and out of work to keep up their health. Coping with stress was found easier because collaboration at work improved and so did the general atmosphere. In addition, better physical fitness is found to increase stress tolerance. There were however, no statistically significant results to show improvement in physical fitness as the programme was relatively short, lasting only six months. It has been established that it takes as much as three months regular training, three times per week, half an hour per day in order to achieve significant difference in physical fitness (Kukkonen et al 1995).

Conclusions

The State Treasury has spent years planning and developing early rehabilitation activities. High age groups among the working population are increasing and early rehabilitation is one way to try to prevent early retirement and continuous sick leaves. Indeed, the later in the disease the patient is admitted for rehabilitation, the harder the job, the longer the period needed, the less the benefits, and the greater the costs.

With early rehabilitation it is possible to decrease symptoms and work-related stress and thus maintain and improve the employees' health and working capacity (Karjula 1987). More emphasis should be put on work-related measures in the future as keeping in good physical form and easing

stress are very important factors in the working community.

The whole programme costed 13.000 FIM.

It has been calculated by the National Pension Institute, Finland that the mean cost of one day sick-leave for employers is about 1500 FIM. With early rehabilitation programmes employers can save a considerable amount of money in the long run.

Summary

In order to maintain a high standard in laboratory animal husbandry the health, well-being and work motivation of the animal technicians are very important. The work is physically and mentally strenuous. Musculoskeletal disorders lead to long term absenteeisms, and as the average age among technicians is high disability pensions are increasing.

It is believed that early rehabilitation can result in more effective utilization of the employees' working capacity by decreasing the amount of sick-leave taken and increasing performance levels in daily tasks. It can also reduce the costs of disability pensions.

In the Central Animal Laboratory, University of Turku, an early rehabilitation programme was set up in August 1994. The laboratory head and 12 animal technicians took part and the programme was voluntary. It consisted of physical fitness tests, physical exercise groups, psychological discussions and a lecture on ergonomics. The aim of the programme was to test basic endurance, motivate physical exercise, provide knowledge on ergonomics and help in dealing with stress and problem solving. The results, though mainly descriptive at the moment, were promising, indicating that by decreasing symptoms and work-related stress it is possible to maintain and improve the employees' health and working capacity. Motivation to keep up physical fitness increased, both in and out of work.

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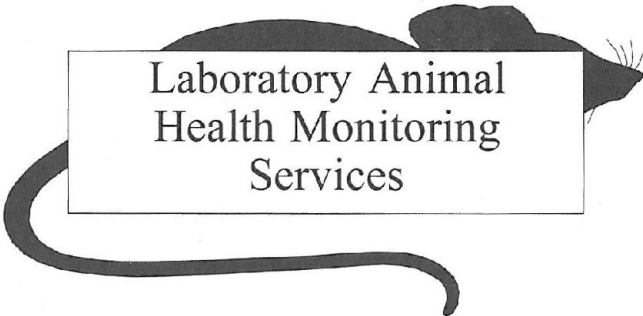


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