

Results of an intensive rehabilitation programme for workers with chronic low back pain

Nicole MAJERY, Aurélie DUVEAU, Dorothee KNAUF-HÜBEL, Ingrid LEMPEREUR,
Service de Santé au Travail Multisectoriel, Luxembourg (STM)
Philippe MAIRIAUX
Ecole de Santé Publique, Université de Liège

The aim of the programme

The aim is to reduce lost days after a back pain episode and to prevent permanent disability. The workers concerned are coming from small and medium sized companies with different kind of activities (handcraft, commercial and industrial activities) . If they complain of low back pain at the check-ups in occupational health, the physician invites them to participate at this programme.
The programme is partially sponsored by the FSE (Fonds Social Européen).

Conditions for participation:

- The program is based on the following principles:
- participation of a voluntary basis
- agreement with the company of the worker
- multidisciplinary approach (occupational health, ergonomics, physical therapy and psychology)



The programme

- back school including anatomy and physiology of the spine, learning of back protection principles
 - physical reconditioning : aerobic fitness, muscular strength and joint flexibility
 - pain and stress management including relaxation techniques
 - work place ergonomic analysis and identification of biomechanical risk factors in order to suggest improvements of the working conditions
- It is organized for groups with maximum 10 workers who participate to 10 sessions over 5 successive weeks



The inclusion criteria are:

- workers injured at work with one episode of back pain requiring at least 20 lost days
- workers with chronic or repeated low back pain

The exclusion criteria are:

- cervical pain
- prolapsed disk requiring surgery

The inclusion or exclusion criteria are assessed at a pre- participation examination by an occupational health physician.



Results of 121 participants	Beginning	End	p
Pain level at the moment of the interview	38.68 (σ25.66)	29.12 (σ25.67)	P<0.001
Pain level at the beginning of day during the 3 last days	47.04 (σ28.66)	39.49 (σ 28.46)	P<0.001
Pain level at the end of day during the 3 last days	58.79 (σ 28.90)	45.76 (σ28.70)	P<0.001
Eifel score	41.92 (σ 19.90)	32.43 (σ 19.47)	P<0.001
Dallas (Q8-Q10)	52.56 (σ 19.15)	49.97 (σ 21.67)	P<0.001
Dallas (Q11-Q13)	43.16 (σ 21.46)	34.22 (σ 22.88)	P<0.001
Dallas (Q14-16))	33.75 (σ 23.53)	27.54 (σ 20.39)	P<0.001
Fingertip to ground (in cm)	15.28 (σ 14.57)	7.25 (σ 13.04)	P<0.001
Muscular force (en sec)	73.58 (σ 58.24)	184.91 (σ 160.12)	P<0.001