

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

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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.



The results:

The programme had 62 participants (40 males and 22 females)
 The mean age for the males was 42.95 years (σ8.92) and for the females 42.52 years (σ 9.87)

	Beginning	End	p
Pain level at the moment of the interview	33 (σ 25.08)	26.7 (σ 24.13)	P<0.06
Pain level at the beginning of day during the 3 last days	41.92 (σ 31.29)	35.49 (σ 29.06)	P<0.13
Pain level at the end of day during the 3 last days	52.67 (σ 32.91)	42.96 (28.59)	P<0.02
Eifel score	40.84 (σ 21.83)	31.82 (σ 20.42)	P<0.001
Dallas (Q8-Q10)	47.12 (σ 20.5)	42.87 (σ 22.91)	P<0.338
Dallas (Q11-Q13)	37.42 (σ 19.84)	33.18 (σ 22.97)	P<0.272
Dallas (Q14-16))	32.42 (σ 24.21)	19.69 (σ 16.86)	P<0.003
Fingertip to ground (in cm)	13.29 (σ 14.26)	6.08 (σ 12.63)	P<0.001
Muscular force (en sec)	79.46 (σ 60.12)	134.10 (σ 135.83)	P<0.005