

ARTICLE

Lumbar Supports to Prevent Recurrent Low Back Pain among Home Care Workers

A Randomized Trial

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Background: People use lumbar supports to prevent low back pain. Secondary analyses from primary preventive studies suggest benefit among workers with previous low back pain, but definitive studies on the effectiveness of supports for the secondary prevention of low back pain are lacking.

Objective: To determine the effectiveness of lumbar supports in the secondary prevention of low back pain.

Design: Randomized, controlled trial.

Setting: Home care organization in the Netherlands.

Patients: 360 home care workers with self-reported history of low back pain.

Intervention: Short course on healthy working methods, with or without patient-directed use of 1 of 4 types of lumbar support.

Measurements: Primary outcomes were the number of days of low back pain and sick leave over 12 months. Secondary outcomes were the average severity of low back pain and function (Quebec Back Pain Disability scale) in the previous week.

Results: Over 12 months, participants in the lumbar support group reported an average of –52.7 days (CI, –59.6 to –45.1 days) fewer days with low back pain than participants who received only the short course. However, the total sick days in the lumbar support group did not decrease (–5 days [CI, –21.1 to 6.8 days]). Small but statistically significant differences in pain intensity and function favored lumbar support.

Limitations: Study participants were unblinded, and a substantial amount of missing data required imputation. Objective data on sick days due to low back pain were not available.

Conclusion: Adding patient-directed use of lumbar supports to a short course on healthy working methods may reduce the number of days when low back pain occurs, but not overall work absenteeism, among home care workers with previous low back pain. Further study of lumbar supports is warranted.

Editors' Notes

Context

Lumbar supports are commonly used to prevent low back pain, but evidence on their effectiveness is lacking.

Contribution

This trial assigned 360 home care workers with a history of low back pain to a short course on healthy work habits, with or without worker-directed use of a lumbar support. Over 12 months, participants assigned to lumbar support had a similar number of sick days but fewer days with low back pain than did those assigned to the course only.

Implication

Adding lumbar supports to instruction on healthy work habits may decrease low back pain recurrence, but not absenteeism, among workers with previous low back pain.

—The Editors

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