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### ***Musculoskeletal***

## **Manual therapy and stability exercises in chronic neck pain**

...is there one modality (or a combination) that produces superior outcomes in posture, pain and function?

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Forward head posture and a rounded shoulder posture are common findings associated with neck pain and shoulder dysfunction, and are often treated in physiotherapy settings. A forward head posture causes an extension of the upper cervical spine and shortening of the extensor muscles of the neck.

Manual therapy is commonly used in several disciplines to improve the segmental movement of the cervical spine, as well as for improving soft tissue restrictions and cervical pain. However, stabilising exercises for the deep neck flexors of the neck and scapular positioning are also commonly used to improve the posture of the

head, neck and shoulders and thus manage pain.

This study aimed to identify if one treatment modality or a combined approach proved to be superior in improving overall function, posture and pain with participants with chronic neck pain.

Sixty participants – all women in the age range of 32 to 42 years old – were recruited from physicians, physiotherapists and orthopaedic surgeons and included in this study. A baseline level for pain was determined using the visual analogue scale, and postural angles were recorded for the cervical spine and shoulder. Functional lifting and endurance testing was measured using the Progressive Iso-inertial Lifting Evaluation (PILE).



Participants were randomly allocated to one of three groups: one group received manual therapy (in a supine position, with the therapist assessing and mobilising hypomobile segments) and stability exercises under supervision (consisting of scapular stability, chin tucks and pectoralis stretches); the second group performed stabilisation exercises under supervision and the third group performed a home-based exercise programme.

After an intervention period of six weeks, it was found that the combined treatment of manual therapy and stability exercises had the greatest impact on pain. Although function and posture improved in both groups that had been receiving supervised stabilisation exercises, a greater improvement in overall function was present in the combined treatment group.

## Expert opinion

This study highlights the need for a combined approach including both manual therapy as well as an exercise-based programme.

The authors of this article state that a combined approach is quite commonly used, but that its effects on specifically posture and function (and not just pain) have not been previously investigated.

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