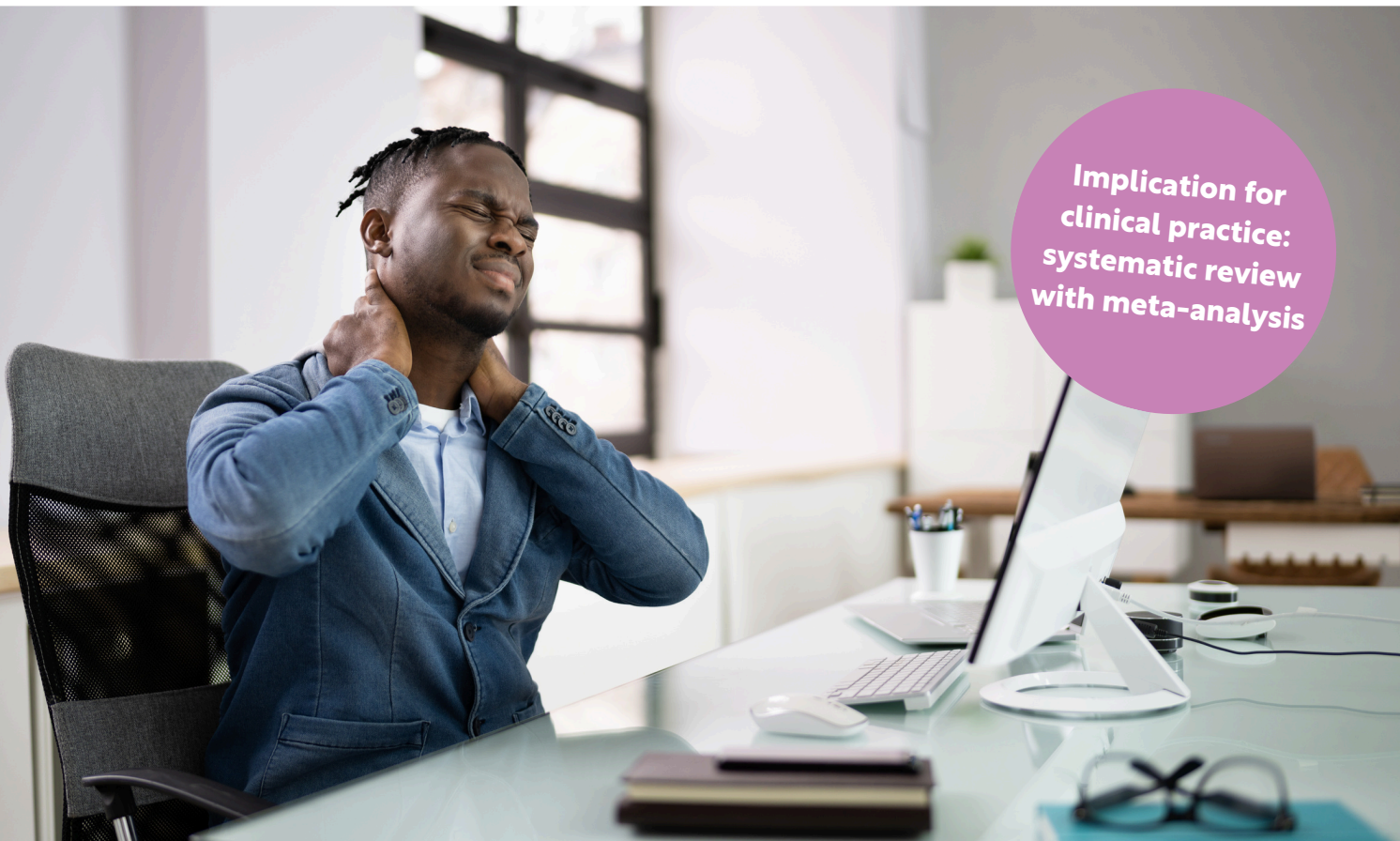


The relationship between forward head posture and neck pain



Implication for
clinical practice:
systematic review
with meta-analysis

Forward head posture is significantly correlated with neck pain in adults and older individuals, though this association wasn't found in adolescents. Neck pain often correlates with weakened deep neck muscles and increased activity in superficial muscles. Therefore, limiting sustained forward head posture, especially during occupational activities, can be beneficial in alleviating neck pain.

Context

The primary aim was to determine whether forward head posture differs between neck pain and asymptomatic subjects. The secondary aim was to investigate if there is a relationship between head posture and neck pain.

Methods

- Systematic review and meta-analysis of 1306 papers.
- 15 articles eligible for inclusion after screening and exclusion (13 for meta-analysis).

Inclusion:

- Investigating forward head posture in individuals with idiopathic neck pain.
- Individuals with acute or chronic idiopathic neck pain of any age group.
- The primary outcome of interest was forward head posture.

Exclusion:

- Underlying pathology such as fractures, rheumatoid arthritis, osteoporosis, or whiplash injuries.
- Assessment of dynamic head posture i.e. during work activity.
- Those with neck pain and other concomitant complaints i.e. headaches.

Results

- Increasing neck pain in adults with forward head posture may be because of a greater angle of flexion thus increasing the weight of the head.
- Despite adolescents potentially spending more time hunched on mobile phones, tablets, or during studying the short-term effects are not noticeable.
- In contrast, there appears to be long-term effects with decreased neck muscle flexibility and endurance in adolescents which predisposes neck pain in later life.

Reference

Mahmoud, N. F., Hassan, K. A., Abdelmajeed, S. F., Moustafa, I. M., & Silva, A. G. (2019). The Relationship Between Forward Head Posture and Neck Pain: a Systematic Review and Meta-Analysis. *Current reviews in musculoskeletal medicine*, 12(4), 562–577. <https://doi.org/10.1007/s12178-019-09594-y>