

reliable data capture with minimal noise and their chromophore alteration patterns corresponded to those already observed in other voluntary muscles. There are limitations (sample size, use of speculum and unfeasibility of further statistical analyses), however, good quality data were presented with individualized and careful assessment of the muscles submitted to training regardless of the dysfunction.

Conclusion: NIRS has the potential for acquiring information not previously accessible, but it is not yet ready for clinical practice, requiring further studies to explore its potential in providing PCO, currently not available through other means.

Implications: In PFM training, we lack standardized methodologies to quantify strength and resistance measurements, which is a challenge for clinical treatment planning. Obtaining PCO, through NIRS technology, can improve the understanding of PFM dysfunctions and respond to the call for techniques that improve care.

Keywords: NIR spectroscopy, Pelvic Floor Disorders, Functional Performance

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ASSOCIATION BETWEEN “TEXT NECK” AND NECK PAIN IN ADULTS: A LONGITUDINAL STUDY

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Background: “Text neck” is defined by the cervical flexion adopted when using mobile devices. The possible causal relationship between this posture and neck pain is still widely discussed.

Objectives: The aim of this study was to investigate this association.

Methods: It is a longitudinal observational study. The sample consisted of 396 volunteers without neck pain aged between 18 and 65 years. Sociodemographic, anthropometric, lifestyle (level of physical activity, smoking, sleep quality), psychosocial (anxiety, depression, social isolation) and smartphone use issues were assessed using a self-reported questionnaire. Text neck was assessed by measuring the cervical flexion angle of participants standing while typing text on their smartphones, using the cervical range of motion (CROM) device at baseline. Two questions were used to assess the point prevalence and frequency of neck pain one year after baseline: “Did you have neck pain today?” With the following answer options “yes” or “no” and “How often do you have neck pain?”, the answer options were “very often”, “often”, “from time to time”, “rarely” and “never”.

Results: Of the total, 84% (n=335) of participants completed the one-year follow-up. Neck pain was reported by 10% (n=40) of the sample. The average cervical flexion angle of the standing participants using the smartphone was 34° (SD=12). Multiple logistic regression analysis showed that participants' neck flexion angle while standing using a smartphone was not associated with neck pain (OR = 1.01; 95% CI: 0.98-1.04; p=0.64) or frequency of neck pain (OR = 1.01; 95% CI: 0.99-1.03; p=0.44) one year after baseline. Of the potential confounders, sleep quality was associated with neck pain (OR = 1.76; 95% CI: 1.18–2.62; p=0.006) and frequency of

neck pain (OR = 1.53, CI 95 %: 1.19–1.96; p=0.001). When compared to active participants, insufficiently active participants increased the chances of neck pain (OR = 2.42; 95%CI: 1.04–5.63; p=0.04).

Conclusion: “Text neck” was not associated with neck pain or frequency of neck pain in adults.

Implications: These results challenge the belief that poor neck posture while using smartphones leads to neck pain and may help mitigate the impact of negative information on the cervical spine.

Keywords: Neck pain, Posture, Text neck

Conflict of interest: The authors declare no conflict of interest.

Acknowledgment: Not applicable.

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ANALYSIS OF ANXIETY INVENTORY SCALE FOR RESPIRATORY DISEASES (RAI) FOR INDIVIDUALS WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE

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Background: Anxiety is a frequent comorbidity in patients with Chronic Obstructive Pulmonary Disease (COPD) and with important repercussions, such as functional impairment, decreased quality of life and adherence to treatment, and increased risk of hospitalization. In this context, the Anxiety Inventory for Respiratory Diseases (AIR), the only instrument specifically developed to investigate anxiety symptoms in this population, was cross-culturally adapted for use in Brazil. Still, the measurement properties of the face-to-face version have not yet been investigated.

Objectives: To investigate the internal consistency, test-retest and inter-rater reliability, convergent and divergent validity of the face-to-face AIR in patients with COPD.

Methods: This is a cross-sectional methodological study. On the first day, after signing the Free and Informed Consent Form, the Mini-Mental State Examination, the sociodemographic and clinical questionnaire were applied, and anthropometric data were collected, followed by spirometry. Subsequently, patients answered the Modified Medical Research Council (mMRC), the COPD Assessment Test (CAT), the AIR, the Hospital Anxiety and Depression Scale (HADS), the Beck Anxiety Inventory (BAI), and the London Chest Activity of Daily Living (LCADL). To determine the test-retest and inter-rater reliability of the IAR, seven days after the first application of the questionnaire, the leading researcher reapplied the scale with a control form via telephone contact, and a second rater contacted patients 48 hours later. The internal consistency of the AIR was measured using Cronbach's alpha and reliability using the Intraclass Correlation Coefficient (ICC). Spearman's correlation test (rho) was used to determine validity (p<0.05).

Results: Twelve individuals [7 female, age 60.5 (min. 53.7-max.70.8) years] participated in the study; nine were included in the test-retest reliability analyses and eight in the inter-rater reliability. For internal consistency, Cronbach's α was 0.94. For test-retest reliability, the ICC was 0.73; for inter-rater reliability, it was 0.88. Regarding convergent validity, significant correlations of high magnitude were observed between the AIR and the HADS anxiety domain (rho = 0.82), depression domain (rho = 0.87), and the total score (rho = 0.79), and of moderate magnitude between the AIR and the BAI (rho = 0.70). For divergent validity, non-significant