ABSTRACT

Background: The ubiquitous use of smartphones among university students has led to prolonged forward head posture, placing significant mechanical stress on the cervical and upper thoracic musculature.

Problem Statement: While "Tech Neck" is a recognized phenomenon, there is a lack of empirical evidence correlating Body Mass Index (BMI) with the severity of localized latent myofascial trigger points in this specific demographic.

Aim: This study aimed to determine the relationship between BMI and mechanical muscle sensitivity levels (MSL) in the upper quadrant muscles of smartphone-using university students.

Methodology: An observational cross-sectional study was conducted with 138 participants, utilizing anthropometric measurements for BMI and standardized manual palpation to grade sensitivity (0–4) in the Upper Trapezius, Levator Scapulae, Rhomboids, and Suboccipital muscles.

Expected Outcome: It was expected that higher BMI would correlate with increased muscle sensitivity; however, results primarily indicated that sensitivity is widespread across all weight categories, showing a stronger correlation with subjective pain (NPRS) than body mass.

Significance: These findings emphasize the need for weight-neutral ergonomic interventions and targeted physiotherapy for all students to mitigate the chronic musculoskeletal risks associated with digital device dependency.

Keywords: Myofascial Trigger Points, BMI, Smartphone Usage, Upper Trapezius, Mechanical Sensitivity.

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