Rozalen Manuel, et al, 2024 Abstract.

TMJ and Perceived Stress

Perceived Stress And TMJ Status In Physiotherapy Students

Objective
The aim of the study, with the use of muscle oxygenation and **surface electromyography** (**sEMG**), was to ascertain the influence of stress on temporomandibular joint (TMJ) status and salivary cortisol in university physiotherapy students before and during exams. Stress is one of the most associated factors studied as a temporomandibular disorder/dysfunction (TMD) predictor and **sEMG** is a useful indicator of muscle tension.

Results
The study found that academic stress influences TMJ status and muscle outcomes such as oxygen saturation, myoglobin concentration, and muscle contraction. Females have a higher risk of developing a TMDs, and in women, age is associated with an increasing risk of suffering moderate TMDs. Sex, age, and stress influence the risk of developing TMDs.

Participants and Researchers
The study consisted of 70 students enrolled in the physiotherapy degree program at Alfonso X El Sabio University, Villanueva de la Cañada, Madrid, Spain. Of the analyzed students, 37.14% showed mild TMDs, 17.14% moderate TMDs, and 45.72% showed no TMDs

The researchers were *Manuel Rozalén*, *Miguel Ángel Alvaredo and Pedro Antonio Mendoza* from the Physiotherapy Department, Faculty of Health Sciences, Alfonso X El Sabio University; with *Marta Macarena Paz-Cortés* and *Andrea Martín-Vacas*, from the Faculty of Dentistry, Alfonso X El Sabio University.

Methods
Data was collected during two distinct academic periods: the first period was characterized by low academic stress and no exams, and the second period coincided with the high academic stress of final course exams.

The collected results included sociodemographic data, assessment of TMJ status, assessment of perceived stress, measurement of salivary cortisol, and evaluation of muscle evaluation (masseter, upper trapezius, and sternocleidomastoid) using a MOXY Monitor for muscle oxygenation and **NeuroTrac MyoPlus 2 Pro** device (Verity Medical) for **surface electromyography** (**sEMG**) to assess TMD.

The material used to perform the **sEMG** is referenced in the scientific literature included in the abstract.

The full abstract can be found at
https://pmc.ncbi.nlm.nih.gov/articles/PMC11206016/