

## RELATIONSHIP BETWEEN PSYCHOLOGICAL FACTORS AND SYMPTOMS OF TMD IN UNIVERSITY UNDERGRADUATE STUDENTS

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### **ABSTRACT**

*Temporomandibular disorders is a collective term used to describe a number of related disorders involving the temporomandibular joints, masticatory muscles and occlusion with common symptoms such as pain, restricted movement, muscle tenderness and intermittent joint sounds. The multifactorial TMD etiology is related to emotional tension, occlusal interferences, tooth loss, postural deviation, masticatory muscular dysfunction, internal and external changes in TMJ structure and the various associations of these factors. The aim of this study was to evaluate the prevalence of the relationship between signs of psychological distress and temporomandibular disorder in university students. A total 150 volunteers participated in this study. They attended different courses in the field of human science at one public university and four private universities. TMD was assessed by the Research Diagnostic Criteria (RDC) questionnaire. Anxiety was measured by means of a self-evaluative questionnaire, Spielberger's Trait-State anxiety inventory, to evaluate students' state and trait anxiety. The results of the two questionnaires were compared to determine the relationship between anxiety levels and severity degrees of chronic TMD pain by means of the chi-square test. The significance level was set at 5%. The statistical analysis showed that the TMD degree has a positive association with state-anxiety ( $p=0.008$ ;  $p<0.05$ ) and negative with trait-anxiety ( $p=0.619$ ;  $p>0.05$ ). Moreover, a high TMD rate was observed among the students (40%). This study concluded that there is a positive association between TMD and anxiety.*

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**Key words:** temporomandibular joint disorders, epidemiology, questionnaires, prevalence, anxiety, depression.

## RELAÇÃO ENTRE FATORES PSICOLÓGICOS E SINTOMAS DE DTM EM ESTUDANTES UNIVERSITÁRIOS

### **RESUMO**

*Disfunção temporomandibular é o termo usado para descrever uma série de distúrbios envolvendo as articulações temporomandibulares, músculos da mastigação e oclusão, com sintomas comuns como dor, restrição de movimento, sensibilidade muscular e ruído articular intermitente. A etiologia da DTM é multifatorial e está relacionada à tensão emocional, interferências oclusais, perda de dentes, desvio postural, disfunção muscular mastigatória, mudanças internas e externas na estrutura da ATM, e a diferentes associações entre esses fatores. O objetivo deste estudo foi avaliar a relação entre estresse psicológico e sinais de desordem temporomandibular em estudantes universitários. Um total de 150 voluntários participaram deste estudo sendo alunos de uma universidade pública e quatro universidades privadas de diferentes cursos da área de ciências*

*humanas. A avaliação da DTM foi realizada por meio do questionário Research Diagnostic Criteria (RDC). Para a avaliação da ansiedade foi aplicado o questionário Ansiedade Traço-Estado de Spielberger. Os resultados dos níveis de ansiedade e dos graus de DTM dos dois questionários foram comparados pelo teste do qui-quadrado, com nível de significância de 5%. A análise estatística mostrou que o grau de DTM tem relação positiva para a Ansiedade-Estado ( $p = 0,008$ ,  $p < 0,05$ ) e negativa para a ansiedade-traço ( $p = 0,619$ ,  $p > 0,05$ ), além disso, foi observado alto índice de DTM entre os estudantes (40%). Por meio dos resultados obtidos e analisados neste estudo, concluiu-se que havia uma associação positiva entre DTM e ansiedade.*

**Palavras chave:** desordem temporomandibular, epidemiologia, questionário, prevalência, ansiedade e depressão.