

# **CORRELATION BETWEEN DENTAL ERGONOMICS RISK FACTORS AND SUBJECTIVE COMPLAINTS OF CUMULATIVE TRAUMA DISORDERS IN DENTAL THERAPISTS IN PRIVATE DENTAL CLINICS**

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## **ABSTRACT**

**Background:** Dental therapists have a heavy workload resulting in various hazards. Work problems caused by poor and incorrect ergonomic hazards are Cumulative Trauma Disorders. Dental therapists are one of the jobs that have a risk of complaints in the musculoskeletal system. The results of a preliminary study showed 50% pain in the neck, 17% pain in the shoulders and 33% pain in the waist.

**Research Objective:** To determine the correlation between dental ergonomic risk factors and subjective complaints of Cumulative Trauma Disorders in dental therapists.

**Method:** The type of quantitative research with an analytical observational approach using a cross-sectional design. The independent variable in the study is dental ergonomic risk factors and the dependent variable is subjective complaints of Cumulative Trauma Disorders. The study was conducted in Condongcatur Village. The sample in the study was 48 respondents. Sampling used the total sampling technique. The research instrument used a dental ergonomic risk factor questionnaire and a Nordic Body Map questionnaire. Data analysis used the Kendall's Tau-B test.

**Results:** Dental ergonomic risk factors were in the low category (54.2%). Subjective complaints of Cumulative Trauma Disorders were in the low category (93.8%). Cross-tabulation of dental ergonomic risk factors with subjective complaints of Cumulative Trauma Disorders was 95.5% moderate dental ergonomic risk factors with low subjective complaints of Cumulative Trauma Disorders. The results of data analysis showed a P. Value of  $0.122 > 0.05$ , there is no correlation between dental ergonomic risk factors and subjective complaints of Cumulative Trauma Disorders.

**Conclusion:** There is no correlation between dental ergonomic risk factors and subjective complaints of Cumulative Trauma Disorders in dental therapists.

**Keywords:** Dental ergonomic risk factors, subjective complaints of Cumulative Trauma Disorders, dental therapists.

**HUBUNGAN FAKTOR RISIKO DENTAL ERGONOMI DENGAN  
KELUHAN SUBJEKTIF *CUMMULATIVE TRAUMA DISORDERS*  
(CTDs) PADA TERAPIS GIGI di KLINIK GIGI SWASTA**

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**ABSTRAK**

**Latar Belakang:** Terapis gigi dan mulut memiliki beban kerja berat mengakibatkan terjadinya berbagai macam bahaya. Masalah kerja yang ditimbulkan akibat bahaya ergonomi yang tidak baik dan benar adalah *Cumulative Trauma Disorders*. Terapis gigi salah satu pekerjaan yang memiliki risiko terjadinya keluhan pada sistem *musculoskeletal*. Hasil studi pendahuluan yang dilakukan menunjukkan 50% sakit dibagian leher, 17% sakit dibagian pundak dan 33% sakit dibagian pinggang.

**Tujuan Penelitian:** Mengetahui hubungan antara faktor risiko dental ergonomi dengan keluhan subjektif *Cumulative Trauma Disorders* pada terapis gigi.

**Metode:** Jenis penelitian kuantitatif dengan pedekatan observasional analitik menggunakan rancangan *cross sectional*. Variabel independent dalam penelitian adalah faktor risiko dental ergonomi dan variabel dependen adalah keluhan subjektif *Cumulative Trauma Disorders*. Penelitian dilakukan di Kelurahan Condongcatur. Sampel dalam penelitian adalah 48 responden. Pengambilan sampel menggunakan teknik *total sampling*. Instrument penelitian menggunakan kuesioner faktor risiko dental ergonomi dan kuesioner *Nordic Body Map*. Analisis data menggunakan uji *Kendall's Tau-B*.

**Hasil:** Faktor risiko dental ergonomi berada pada kategori rendah (54,2%). Keluhan subjektif *Cumulative Trauma Disorders* berada pada kategori rendah (93,8%). Tabulasi silang faktor risiko dental ergonomi dengan keluhan subjektif *Cummulative Trauma Disorders* yaitu 95,5% faktor risiko dental ergonomi sedang dengan keluhan subjektif *Cummulative Trauma Disorders* rendah. Hasil analisis data menunjukan nilai *P. Value* sebesar  $0,122 > 0,05$  sehingga tidak tedapat hubungan antara faktor risiko dental ergonomi dengan keluhan subjektif *Cumulative Trauma Disorders*.

**Kesimpulan:** Hubungan faktor risiko dental ergonomi tidak berhubungan dengan keluhan subjektif *Cumulative Trauma Disorders* pada terapis gigi.

**Kata Kunci:** Faktor risiko dental ergonomi, keluhan subjektif *Cumulative Trauma Disorders*, terapis gigi.