

## **ABSTRAC**

**Background:** Temporomandibular disorder (TMD) is a functional and pathological condition that affects TMJ. TMD has symptoms, one of which is changes in mandibular motion in the form of deviation and deflection. Etiology of TMD is malocclusion, parafunctional habits, stress, trauma, etc. Angle classification malocclusion is divided into three classes, namely class I, class II and class III.

**Objective:** To know changes of mandibular movement prevalence in Rumah Sakit Gigi dan Mulut Universitas Muhammadiyah Yogyakarta (RSGM UMY) patients based on Angle classification malocclusion.

**Method:** The design of this study was observational descriptive using a cross sectional approach, chosen by accidental sampling technique. The population of this study were RSGM UMY patients, there were 224 patients who were in accordance with the inclusion criteria. Changes in mandibular motion were measured by recording and depicting patterns of jaw openings

**Results:** Results obtained from 224 patients examined, patients with class I malocclusion who experienced deflection as many as 80 people, a deviation of 58 people and normal as many as 32 people. Patients with class II malocclusion who had a deflection of 5 people, a deviation of 10 people and normal as many as 4 people. Patients with class III malocclusion who had deflections were 10 people, deviations were 15 people and normal were 10 people

**Conclusion:** Percentage of RSGM UMY patients that experienced deflection with malocclusion class I, II, and III are 84.2%, 5.3%, and 10.5%, patients that experienced deviation are 69.9%, 12.0%, and 18.1%, while patients who don't experienced change of mandibular motion are 69.6%, 8.7%, dan 21.7%.

**Keyword:** TMJ, TMD, deviation, deflection, Angle

## INTISARI

**Latar Belakang:** *Temporomandibular disorder* (TMD) merupakan kondisi fungsional dan patologis yang mempengaruhi TMJ. TMD memiliki gejala salah satunya adalah perubahan gerak mandibula yang berupa deviasi dan defleksi. Etiologi TMD adalah maloklusi, kebiasaan parafungsional, stress, trauma, dll. Maloklusi klasifikasi Angle dibagi menjadi tiga kelas yaitu kelas I, kelas II dan kelas III.

**Tujuan:** Mengetahui gambaran perubahan gerak mandibula pada pasien Rumah Sakit Gigi dan Mulut Universitas Muhammadiyah Yogyakarta (RSGM UMY) berdasarkan maloklusi klasifikasi Angle.

**Metode:** Desain penelitian ini adalah deskriptif observasional dengan pendekatan *cross sectional*, pengambilan sampel menggunakan teknik *accidental sampling*. Populasi dari penelitian ini adalah pasien RSGM UMY dan didapatkan sampel sebanyak 224 pasien yang sesuai dengan kriteria inklusi. Perubahan gerak mandibula diukur dengan perekaman dan penggambaran pola bukaan rahang

**Hasil:** Hasil yang diperoleh dari 224 pasien yang diperiksa, pasien dengan maloklusi kelas I yang mengalami defleksi sebanyak 80 orang, deviasi sebanyak 58 orang dan normal sebanyak 32 orang. Pasien dengan maloklusi kelas II yang mengalami defleksi 5 orang, deviasi sebanyak 10 orang dan normal sebanyak 4 orang. Pasien dengan maloklusi kelas III yang mengalami defleksi sebanyak 10 orang, deviasi sebanyak 15 orang dan normal sebanyak 10 orang.

**Kesimpulan:** Persentase pasien RSGM UMY yang mengalami defleksi dengan maloklusi kelas I, II, dan III berturut-turut sebesar 84.2%, 5.3%, dan 10.5%, pasien yang mengalami deviasi sebesar 69.9%, 12.0%, dan 18.1%, sedangkan yang tidak mengalami perubahan gerak mandibula sebesar 69.6%, 8.7%, dan 21.7%.

**Kata kunci:** TMJ, TMD, deviasi, defleksi, Angle