

## ABSTRACT

**Background:** Temporomandibular disorders (TMDs) are a heterogeneous group of conditions that affect the temporomandibular joint and/or jaw muscles. The most common symptom found in someone with a temporomandibular joint disorder is joint sounds. The etiology of TMD is multifactorial, but the state of occlusion such as malocclusion is related to the development of temporomandibular joint dysfunction. Some studies stated that certain categories of malocclusion can result in TMD.

**Objective:** Determine the number of RSGM UMY patients who experience joint sounds based on the type of malocclusion.

**Method:** Descriptive observational with a cross-sectional research design. 240 samples were taken with accidental sampling technique according to inclusion and exclusion criteria. Examination of joint sounds is done by palpation and auscultation while the type of malocclusion is known from the intraoral examination.

**Results:** Out of 240 samples examined, 49.6% experienced joint sounds and 50.4% did not experience joint sounds. In patients who experienced joint sounds, 73.9% class I malocclusion, 10.1% class II malocclusion and 16.0% class III malocclusion.

**Conclusion:** The percentage of patients who experience joint sounds is 49.6%, where joint sounds are most commonly found in patients with class I malocclusion.

**Keywords:** TMD, Joint Sounds, Malocclusion

## INTISARI

**Latar Belakang:** *Temporomandibular disorders* (TMD) adalah kelompok heterogen dari kondisi yang mempengaruhi sendi temporomandibular dan/atau otot rahang. Gejala yang paling sering ditemukan pada seseorang dengan gangguan sendi temporomandibular adalah bunyi sendi. Etiologi TMD bersifat multifaktorial, tetapi keadaan oklusi seperti maloklusi berhubungan terhadap perkembangan disfungsi sendi temporomandibular. Beberapa penelitian menyatakan bahwa kategori tertentu dari maloklusi dapat mengakibatkan TMD.

**Tujuan:** Mengetahui jumlah pasien RSGM UMY yang mengalami kejadian bunyi sendi berdasarkan tipe maloklusi.

**Metode:** Deskriptif observational dengan desain penelitian *cross-sectional*. Sampel diambil sebanyak 240 pasien dengan teknik *accidental sampling* sesuai dengan kriteria inklusi dan eksklusi. Pemeriksaan bunyi sendi dilakukan dengan cara palpasi dan auskultasi sedangkan tipe maloklusi diketahui dari pemeriksaan intraoral.

**Hasil:** Dari 240 sampel yang diperiksa, 49.6% mengalami bunyi sendi dan 50.4% tidak mengalami bunyi sendi. Pada pasien yang mengalami bunyi sendi, 73.9% maloklusi kelas I, 10.1% maloklusi kelas II dan 16.0% maloklusi kelas III.

**Kesimpulan:** Persentase pasien yang mengalami bunyi sendi sebanyak 49.6%, dimana pasien yang mengalami bunyi sendi paling banyak ditemukan pada pasien dengan maloklusi kelas I.

**Kata kunci:** TMD, Bunyi Sendi, Maloklusi