

**VARIATION OF MALOCCLUSION AND ORTHODONTIC TREATMENT
NEED IN CHINESE CHILDREN AGE 11-14
(Santa Maria Middle School Surabaya)**

ABSTRACT

Background: Malocclusion is the most common oral problem, along with caries and periodontal disease. Malocclusion is an anomaly that damages the composition and function of teeth. Early examination of malocclusions is needed to minimize the healthy tissue damage and facilitate further treatment. Hereditary is one of the important aspects that influence the stomatognathic system, same goes for different ethnicities, the arrangement of the teeth must be different. Research on ethnicity is important for care planning. Indonesia is a pluralistic nation that has a wide ethnic/racial diversity. One of them is Chinese. Malocclusion can be measured using IOTN because this index is easy to use, simple and internationally recognized as a valid malocclusion measurement tool. **Purpose:** To find out the variations of malocclusion and orthodontic treatment need in Chinese children age 11-14 (Santa Maria Middle School Surabaya) **Methods:** This observational descriptive study involved 57 samples (31 women and 26 men) aged 11-14 years ethnic Chinese. Measurement of Angle's Classification and DHC IOTN were carried out on the study model (indirect). Measurements by orthodontist and researcher were tested with the Wilcoxon Signed Rank Test. **Result:** As many as 7% of children did not/need a little treatment, 39% of children needed borderline treatment, 54% of children really needed treatment. **Conclusion:** As many as 95% of children have Class I Angle and 54% of children really need orthodontic treatment.

Keywords: Severity of malocclusion, Angle, IOTN, DHC, Chinese

**VARIASI MALOKLUSI DAN KEBUTUHAN PERAWATAN ORTODONTI
ANAK USIA 11-14 TAHUN ETNIS TIONGHOA
(SMP SANTA MARIA SURABAYA)**

ABSTRAK

Latar Belakang: Maloklusi adalah masalah rongga mulut yang paling sering terjadi, bersama dengan karies dan penyakit periodontal. Maloklusi merupakan anomali yang merusak susunan dan fungsi gigi. Pemeriksaan maloklusi sedini mungkin diperlukan untuk meminimalisir kerusakan jaringan sehat dan memudahkan perawatan selanjutnya. Etiologi herediter merupakan salah satu aspek penting yang memengaruhi sistem stomatognati sehingga pada etnis yang berbeda, susunan geligi pasti berbeda. Penelitian pada etnis penting untuk perencanaan perawatan. Indonesia merupakan bangsa majemuk yang memiliki keberagaman etnis/ras yang luas., salah satunya etnis Tionghoa. Maloklusi dapat diukur menggunakan IOTN karena indeks ini mudah digunakan, sederhana dan diakui internasional sebagai alat ukur maloklusi yang valid. **Tujuan:** Mengetahui variasi maloklusi dan kebutuhan perawatan ortodonti anak usia 11-14 tahun etnis Tionghoa (SMP Santa Maria Surabaya) **Metode:** Penelitian deskriptif observasional ini melibatkan 57 sampel (31 perempuan dan 26 laki-laki) berumur 11-14 tahun etnis Tionghoa. Pengukuran Klasifikasi Angle dan DHC IOTN dilakukan pada model studi (tidak langsung). Pengukuran oleh ortodontis dan peneliti diuji dengan *Wilcoxon Signed Rank Test*. **Hasil:** Sebanyak 7% anak tidak/sedikit memerlukan perawatan, 39% anak memerlukan perawatan borderline, 54% anak sangat memerlukan perawatan. **Kesimpulan:** Sebanyak 95% anak memiliki klas I Angle dan 54% anak sangat memerlukan perawatan ortodonti.

Kata kunci: Tingkat keparahan maloklusi, Angle, IOTN, DHC, Tionghoa