

INTISARI

Latar belakang : Anak *stunting* mengalami gangguan dan keterlambatan tumbuh kembang akibat kekurangan gizi kronis. Kekurangan gizi kronis yang disebabkan oleh kekurangan asupan makronutrien dan mikronutrien dalam jangka waktu lama akan mengakibatkan terjadinya ketidakseimbangan antara jumlah sel parabasal, intermediet, dan superfisial, serta menurunkan tingkat maturasi sel epitel rongga mulut. Proses maturasi optimal terjadi pada anak usia 6–9 tahun yang berada pada fase pertumbuhan aktif. Kebutuhan gizi yang tidak terpenuhi menyebabkan maturasi sel epitel menjadi tidak optimal. **Tujuan** : mengetahui perbandingan maturasi sel epitel mukosa bukal pada anak *stunting* dan anak normal usia 6 - 9 tahun di Kecamatan Toroh, Kabupaten Grobogan, Jawa Tengah. **Metode** : Jenis penelitian yang dilakukan adalah observasional *cross-sectional* dengan jumlah subjek 27 anak *stunting* dan 27 anak normal. Pemeriksaan awal dilakukan dengan mengukur berat dan tinggi badan, melakukan pemeriksaan riwayat kesehatan melalui KIA, dan swab menggunakan *cytobrush* di mukosa bukal dari regio premolar satu kiri sampai molar kedua kiri. Perhitungan indeks maturasi dilakukan melalui pengamatan di bawah mikroskop cahaya dengan perbesaran 400 kali. Sel dihitung sesuai jenisnya yaitu sel parabasal, sel intermediet, dan sel superfisial dalam lima lapang pandang kemudian dihitung persentasenya. **Hasil** : kelompok anak *stunting* memiliki jumlah sel superfisial (23,58%), sel intermediet (69,86%), dan sel parabasal (6,54%), sedangkan kelompok anak normal memiliki jumlah sel superfisial (21,65%), sel intermediet (78,34%), dan sel parabasal (0%). Hasil uji *chi-square* menunjukkan nilai 7,10 ($p < 0.05$) yang berarti terdapat perbedaan bermakna antara proporsi jumlah sel superfisial, intermediet, dan parabasal antara kelompok anak *stunting* dan anak normal, dengan kata lain maturasi sel epitel pada kelompok anak *stunting* lebih lambat dibandingkan anak normal.

Kesimpulan : maturasi sel epitel mukosa bukal pada anak *stunting* usia 6 - 9 tahun lebih lambat dibandingkan anak normal di Kecamatan Toroh, Kabupaten Grobogan, Jawa Tengah

Kata Kunci: Maturasi, sel epitel mukosa, *stunting*

ABSTRACT

Background: Stunted children experience impaired and delayed growth and development due to chronic malnutrition. Chronic nutritional deficiencies caused by prolonged insufficiency of macronutrient and micronutrient intake lead to an imbalance in the number of parabasal, intermediate, and superficial cells, resulting in decreased epithelial cell maturation in the oral cavity. Children aged 6–9 years are in an active growth phase, during which optimal cellular maturation occurs. Inadequate nutritional intake leads to suboptimal maturation of epithelial cells.

Objective: This study aimed to compare the maturation of buccal mucosal epithelial cells between stunted and normal children aged 6–9 years in Toroh District, Grobogan Regency, Central Java. **Methods:** This research employed an observational cross-sectional design involving 27 stunted children and 27 normal children. Initial examinations included anthropometric measurements (weight and height), health history evaluation through maternal and child health records (KIA), and buccal mucosa swab collection using a cytobrush from the left premolar to the second molar region. The maturation index was calculated through microscopic examination under 400x magnification. Cells were classified into parabasal, intermediate, and superficial types, counted across five fields of view, and expressed as percentages. **Results:** The stunted group showed an average of superficial cells (23.58%), intermediate cells (69.86%), and parabasal cells (6.54%), while the normal group exhibited superficial cells (21.65%), intermediate cells (78.34%), and parabasal cells (0%). The Chi-square test yielded a value of 7.10 ($p < 0.05$), indicating a statistically significant difference in the proportion of superficial, intermediate, and parabasal cells between the stunted and normal groups. This suggests that epithelial cell maturation in the stunted group is slower than in the normal group. **Conclusion:** The maturation of buccal mucosal epithelial cells in stunted children aged 6–9 years was slower than in normal children in Toroh District, Grobogan Regency, Central Java.

Keywords: *Maturation, Epithelial cell mucosa , Stunting*