ABSTRACT

PERBANDINGAN UKURAN MESIODISTAL, PANJANG DAN LEBAR LENGKUNG GELIGI ANTARA KELOMPOK CINA DAN INDIA

(Studi di Kuala Lumpur)

(COMPARISON OF MESIODISTAL WIDTH, ARCH LENGTH AND WIDTH BETWEEN CHINESE AND INDIAN GROUPS)

(Studies in Kuala Lumpur)

Background. *The size of the teeth and jaw varied in each human being. The success of a malocclusion treatment depends on the diagnosis and the treatment plan. Studies on characteristics of the teeth such as the size of teeth and the teeth position, can be used to find out the origin of a population. Genetic factors play an important role in determining the size and the shape of teeth and the tooth arch of a population.* ***Purpose.*** *The aim of this study was to find out whether there are differences of mesiodistal width, arch length and width between these two groups in Kuala Lumpur, Malaysia, which are Chinese and Indians.* ***Method.*** *This research was done on 60 high school girls, equally divided into 30 Chinese and 30 Indians, aged 16year-old with Angle's Classification Class 1. Dental impressions were taken using dental tray and alginate, and constructed into study models using gypsum. The mesiodistal width for both upper and lower jaws were measured, one by one, from the right permanent first molar until the left permanent first molar. The arch lengths were measured for upper and lower jaws, on both right and left sides, and were separated according to their segments, which are anterior and posterior. The arch width were measured for both upper and lower jaws, horizontally, from canine to canine, and from first molar to first molar.* ***Results.*** *There were significant differences ($p<0.05$) in the mesiodistal width for each teeth except for teeth 15 and teeth 41, arch length and arch width, except for the width of canine to canine for the lower jaw, between the Chinese and Indians in Kuala Lumpur.* ***Conclusion.*** *The mesiodistal width, arch length and width for both Chinese and Indians, are different.*

Keywords: *Mesiodistal width, arch length, arch width, genetic factors, groups*