# Letter to the Editor

# Regarding "Cephalic index of Gurung community of Nepal - An anthropometric study" in *Kathmandu University Medical Journal* (2005) Vol. 3, No. 3, Issue 11, 263-265'

## Menezes RG<sup>1</sup>, Kanchan T<sup>2</sup>, Srinivasan R<sup>3</sup>, Uysal S<sup>4</sup>

<sup>1</sup>Assistant Professor, <sup>2</sup> Assistant Professor Department of Forensic Medicine and Toxicology, <sup>3</sup>Department of Pathology, Kasturba Medical College, Manipal- 576104, India, <sup>4</sup>Senior Radiologist, Department of Radiology Ankara Training and Research Hospital, Ankara, Turkey

### Dear Editor,

We read with great interest the original article entitled "Cephalic index of Gurung community of Nepal: An anthropometric study" by Lobo et al.<sup>1</sup> published in one of the recent issues of Kathmandu University Medical Journal [Kathmandu University Medical Journal (2005) Vol. 3, No. 3, Issue 11, 263-265]. To our knowledge, this is the first report studying the cephalometric measurements of the Nepalese Gurung community and, therefore, is of considerable ethnic interest.

Attempts to establish reliable cephalometric or craniometric differentiation between races are as old as craniometry<sup>2</sup>. Cephalic index of 80.0 to 84.9 is categorized as brachycephalic<sup>2</sup>. The conclusion of the authors<sup>1</sup> that the Nepalese Gurung community is brachycephalic is questionable when only 38.20% of the 267 subjects in the study group have a cephalic index of 80.0 to 84.9.

In our opinion, the documented cephalometric measurements of the Nepalese Gurung community, as already mentioned, are of considerable ethnic interest, but their use in the field of 'Forensics' as suggested by the authors<sup>1</sup> is restricted. Cephalic index of the Gurung community is definitely on the higher side when compared to other studies cited by the authors<sup>1</sup> and may be helpful in the determination of race, but then it is presently of limited forensic value with increased population movements and interbreeding.

The study<sup>1</sup> also attempted to determine whether cephalic index was a useful criterion for sex determination in the Gurung population. The results confirmed that the mean of cephalic index in males was lower than in females. A statistically significant difference was obtained between the means of cephalic index in both sexes (Student's ttest: P < 0.05). From the forensic point of view, the study would have been more valuable if it was supported by discriminative analysis to reveal the value of the findings in sex determination. Therefore, even though the study confirms that the mean of cephalic index in males is lower than in females, it is not a very useful indicator for sex determination in forensic cases, and can be used only as an adjunctive finding.

### References

- Lobo SW, Chandrashekhar TS, Kumar S. Cephalic index of Gurung community of Nepal: An anthropometric study. Kathmandu Univ Med J (KUMJ) 2005; 3(11): 263-5.
- Williams PL, Warwick R, Dyson M, Bannister LH, eds. Gray's anatomy. 37<sup>th</sup> ed. Edinburgh: ELBS with Churchill Livingstone, 1989.