Table 1: Comparision of tooth size between males & femlaes

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Sex | Mean ±S.D. | Range | p-value |
| ∑Mandibular incisors | M | 22.4±1.6 | 19.2-26.1 | 0.90 |
| F | 22.5±1.6 | 18.8-25.9 |
| ∑Maxillary CPM | M | 20.9±1.5 | 18.2-24.9 | 0.64 |
| F | 20.8±1.2 | 17.0-23.6 |
| ∑ Mandibular CPM | M | 20.8±1.6 | 20.8-24.9 | 0.48 |
| F | 20.6±1.4 | 17-23.6 |

Table-2: Comparison of width of canines & premolars between right and left side

|  |  |  |  |
| --- | --- | --- | --- |
|  | Right side | Left side | p-value |
| ∑CPM (Maxilla) | 20.9±1.4 | 20.8±1.4 | 0.11 |
| ∑CPM (Mandible) | 20.4±1.4 | 20.3±1.3 | 0.24 |

∑CPM ; Combined width of canine and premolars

**Table 3: Comparison of actual tooth size and tooth size predicted by Moyer’s and Tanak-Johnston Method**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Arch | Prediction method | Mean difference (Actual –predicted) | SD | SEM | Sig |
| Maxilla (male) | Moyers 75% | -0.78 | 1.0 | 0.17 | 0.00\* |
| Moyers 50% | -0.19 | 1.0 | 0.19 | 0.32 |
| Tanaka-Johnston | -1.2 | 1.0 | 0.18 | 0.00 \* |
| Mandible(male) | Moyers 75% | -0.8 | 1.1 | 0.2 | 0.00\* |
| Moyers 50% | -0.01 | 1.1 | 0.2 | 0.93 |
| Tanaka-Johnston | -0.87 | 1.1 | 0.2 | 0.00\* |
| Maxilla(female) | Moyers 75% | -0.42 | 1.0 | 0.14 | 0.00\* |
| Moyers 50% | 0.33 | 1.0 | 0.15 | 0.03\* |
| Tanaka-Johnston | -1.4 | 0.86 | 0.12 | 0.00 \* |
| Mandible(Female) | Moyers 75% | -0.5 | 0.96 | 0.14 | 0.01 \* |
| Moyers 50% | 0.31 | 0.96 | 0.14 | 0.03 \* |
| Tanaka-Johnston | -1.1 | 1.1 | 0.14 | 0.00 \* |

Table 4: Characteristics of the regression equation

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ∑CPM | Sex | r | r2 | Regression coefficient | | Standard error of Mean |
| a | b |
| Maxillary | M | 0.77 | 0.60 | 4.33 | 0.74 | 0.99 |
| F | 0.75 | 0.57 | 7.5 | 0.59 | 0.87 |
| M+F | 0.75 | 0.57 | 6.4 | 0.64 | 0.92 |
| Mandibular | M | 0.79 | 0.62 | 2.7 | 0.80 | 1.0 |
| F | 0.75 | 0.56 | 6.5 | 0.62 | 0.92 |
| M+F | 0.76 | 0.58 | 5.3 | 0.68 | 0.97 |

∑CPM; combined mesio-distal width of canines and premolars, r; correlation coefficient,r2;coefficient of determination,M;males;F;females

Table5: Regression equation

|  |  |  |
| --- | --- | --- |
| ∑CPM | Sex | Equation |
| Maxillary | M | Y=4.33+0.74x |
| F | Y=7.5+0.59x |
| M+F | Y=6.4+0.64x |
| Mandibular | M | Y=2.7+0.80x |
| F | Y=6.5+0.62x |
| M+F | Y=5.3+0.68x |

∑CPM; combined mesio-distal width of canines and premolars, M;males;F;females

Table 6: Tooth size prediction table based on regression equation developed by this study

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Sum of incisors | ∑ CPM Male maxillary | ∑CPM Female maxillary | ∑CPM Male Mandibular | ∑CPM female Mandibular |
| 18.5 | 18.6 | 18.4 | 17.5 | 18.0 |
| 19 | 19.0 | 18.7 | 17.9 | 18.3 |
| 19.5 | 19.3 | 19.0 | 18.3 | 18.6 |
| 20 | 19.7 | 19.3 | 18.7 | 18.9 |
| 20.5 | 20.1 | 19.6 | 19.1 | 19.2 |
| 21 | 20.5 | 19.9 | 19.5 | 19.5 |
| 21.5 | 20.9 | 20.2 | 19.9 | 19.8 |
| 22 | 21.3 | 20.5 | 20.3 | 20.1 |
| 22.5 | 21.7 | 20.8 | 20.7 | 20.5 |
| 23 | 22.0 | 21.1 | 21.1 | 20.8 |
| 23.5 | 22.4 | 21.4 | 21.5 | 21.1 |
| 24 | 22.8 | 21.7 | 21.9 | 21.4 |
| 24.5 | 23.2 | 22.0 | 22.3 | 21.7 |
| 25 | 23.6 | 22.3 | 22.7 | 22.0 |
| 25.5 | 24.0 | 22.5 | 23.1 | 22.3 |

∑CPM; combined mesio-distal width of canines and premolars, M;males;F;females

Table 7: Comparison of regression equation developed by various studies done in Nepalese subjects

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ∑CPM | Study By | r | r 2 | Regression coefficient | | Standard error of mean |
| a | b |
| Maxillary | Jaiswal et al | 0.51 | 0.26 | 13.35 | 0.35 | 0.88 |
| Gyawali et al | 0.71 | 0.51 | 6.3 | 0.66 | 0.91 |
| Present study | 0.75 | 0.57 | 6.4 | 0.64 | 0.92 |
| Mandibular | Jaiswal et al | 0.52 | 0.27 | 11.6 | 0.40 | 0.99 |
| Gyawali et al | 0.73 | 0.53 | 4.8 | 0.70 | 0.92 |
| Present study | 0.76 | 0.58 | 5.3 | 0.68 | 0.97 |

r; correlation coefficient,r2,coefficient of determination