



Reconstruction of Stature from Long Bone Lengths

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ABSTRACT An attempt has been made in the present study to formulate regression formulae for reconstruction of stature using all the six long bones, i.e. humerus, radius, ulna, femur, tibia and fibula, belonging to 82 male and 62 female documented skeletons from Bhopal, Madhya Pradesh. A total of 1728 long bones (984 male and 744 female) were measured for maximum length in accordance with the standard measurement technique. The stature was obtained for each skeleton from the documented records. Analysis revealed that the bilateral differences were non significant for either sex thus the sides were pooled for further analysis which revealed highly significant sex differences in bone lengths and documented stature ($p < 0.001$). It is further observed that all the three lower limb bones exhibit high correlation with stature and a relatively low standard error of estimate for both the sexes as compared to the three bones of the upper limb. Femur provides the best estimate of stature among all the six long bones for either sex as it exhibits the least SEE and the highest correlation with stature. However a combination of all the six long bones further enhances the value of correlation as well as reduces the SEE which provides a more accurate estimate of stature for both males and females

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