Stature Prediction from Anthropometry of Extremities among Jordanians

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Abstract : Stature of an individual has an important role in identification, which is often required in medico-legal practice. The estimation of stature is an important step in the identification of dismembered remains or when only a part of a skeleton is only available as in major disasters or with mutilation. There is no published data on anthropological data among Jordanian population. The present study was designed in order to find out relationship of stature to some anthropometric measures among a sample of Jordanian population and to determine the most accurate and reliable one in predicting the stature of an individual. A cross sectional study was conducted on 336 adult healthy volunteers , free of bone diseases, nutritional diseases and abnormalities in the extremities after taking their consent. Students of Faculty of Medicine, Mutah University helped in collecting the data. The anthropometric measurements (anatomically defined) were stature, humerus length, hand length and breadth, foot index and knee height on both right and left sides of the body. The measurements were typical on both sides of the bodies of the studied samples. All the anthropologic data showed significant relation with age except the knee height. There was a significant difference between male and female measurements except for the foot index where F= 0.269. There was a significant positive correlation between the different measures and the stature of the individuals. Three equations were developed for estimation of stature. The most sensitive measure for prediction of a stature was found to be the humerus length.

Keywords : foot index, foot length, hand length, humerus length, stature

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