

The distribution of somatotypes and sexual dimorphism among a selected group of young Sinhalese adults

L.H.L.C. De Silva¹, H.M.I.U. Herath¹, W.L.N.S. Samaranayake¹, S.I. Jayasinghe¹, P.P.C.K. Gunawardena¹, A.P.H.M. Ariyawansa¹, K.K. Wijeyarathne¹, M.A.M. Azam¹, A.A.H. Supunda¹, A.K.P. Rathnayake¹ and J.K. Dissanayake^{2*}

¹*Medical undergraduates, Faculty of Medicine, University of Peradeniya, Sri Lanka*

²*Department of Anatomy, Faculty of Medicine, University of Peradeniya, Sri Lanka*

Composition of the body changes with level of physical activity, gender nutrition and genetic factors etc. It is important to understand these aspects of human constitution as it shows relationships with disease conditions, physical performance and behaviour. Somatotype is a measure of physique of the body at present. Research has shown that this is a better indicator of body composition than indicators such as body mass index. It quantifies and categorise the present shape and composition of human body in to three components namely endomorphy or the level of fatness, mesomorphy or the development of the musculoskeletal compartment and ectomorphy or the linearity of the body. As such distribution of somatotype of a population reflects the activity level, physical performance tendencies, disease preponderance and predisposition. This study was carried out to verify the distribution of somatotypes among a group of Sinhalese Medical students who were not suffering from any chronic illnesses, not under medical surveillance, haven't got any physical deformity. Consecutive sampling helped to select 103 males and 97 females. Somatotype of this group was determined according to the method described by J.E.L. Carter in 2002. The age distribution of the study group was 20-26 years. Of the three somatotype components studied, endomorphy was dominant among female students whereas males had a physique with a balance in all three components. Compared to evidence provided by previous studies, it is concluded that body composition of females of this study reflects a low level of physical activity. In relation to somatotype and individual anthropometric measurements, a significant sexual dimorphism was demonstrated.

* jayamkd@yahoo.com