

The Evaluation of Living Stature in Purana Inhabitants at the Foot of Sigiriya, Sri Lanka

K. M. Chandimal¹, S. G. Yasawardene² and G. Adikari³

**¹Department of Anatomy, Wickramarachchi Ayurveda Institute, University of Kelaniya; ² Department of Anatomy, University of Sri Jayewardenapura; ³ Postgraduate Institute of Archaeology, University of Kelaniya
*Chandimal06@yahoo.com***

The human stature is determined by combination of genetic and environment factors such as nutrition and socioeconomic states. The human stature can vary among populations. The present study evaluates the living stature of present purana inhabitants at the foot of the Sigiriya. The stature of present purana population was taken from 300 male and female purana inhabitants representing Pidurangala, Thalkote, Diyakepilla and Nagalaweve purana villages of Sigiriya. The selection of purana individual was based on oral pedigree analysis and pedigree was traced back to at least three generations. The stature was measured using a temporary stadiometer prepared by us with the accuracy of 0.1cm. The mean stature of purana females and males were 152.90cm \pm 7.05 and 165.70cm \pm 7.58 respectively. The obtained male and female mean stature of the study was higher than reported average stature of Sri Lankan present male being 163.6cm \pm 6.9 and female being 151.4cm \pm 6.4 reported by Ranasinghe 2011. The obtained mean stature male being 165.70cm \pm 7.58 was higher than the reported mean height of vedda being 156.62cm \pm 5.59 reported by Wikramanayake 1992. The obtained mean stature of purana male was higher than the Indian male being 165.2cm reported by Deaton 2008, Malaysian male being 164.7cm reported by Lim et al 2000 and Indonesian male being 158cm reported by Tunonggir 2009 while the mean stature of male was lower than the Chinese male being 166.3cm reported by Yang et al 2005. The obtained mean stature of purana female was higher than the Indian female being 152.1cm reported by Deaton 2008, Indonesian female being 147cm reported by Tunonggir 2009 while the mean stature was lower than the Chinese female being 157cm reported by Yang et al 2005 and Malaysian female being 153.3cm reported by Lim et al. 2000. The higher stature of purana inhabitants of Sigiriya may be due to having agricultural live hood and people maintaining better nutrition and another contributed factor by being a genetically isolated group.

Key words: Purana inhabitants, living height, Human diversity