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**Original article
Study of carrying angle of medical students by using goniometer**

**1Dr.Manoranjitham.R.,M.S, 2Dr.Suresh R.Gosai.M.D, 3Dr.Arunkumar .K.R., M.D ,4 Dr.Shalini. R. M.D, 5Dr.Parthasarathi. R.,M.D**

[ 1Associate Professor, 2H.O.D & Prof, 3Asst Prof), 4 Asst Prof, 5 PS&M ]

Name of the Institute/college: Dept of Anatomy,Dhanalakshmi Srinivansan Medical College & Hospital.
Corresponding author : Dr.Manoranjitham.R.,M.S , Associate Professor, Dept of Anatomy,D.S.M.C.& Hospital, Siruvachur,Perambalur.Tamil Nadu.

**Abstract**

**Introduction:** Carrying angle is the angle between the median axis of arm and that of the fully extended and supinated forearm. The carrying angle is greater in females and in the dominant upper limb.

**Aim and Objectives**: To study the variations in the carrying angle of right and left upper limbs of same sex, to compare the difference in the carrying angle of right and left upper limbs between the sexes and to study the relation of the carrying angle with the height of the individual, hip circumference, arm and forearm length.

**Materials and Methods:** 560healthy students of Dhanalakshmi Srinivasan Medical College and Hospital were selected. Height of the students was measured using a stature meter. Hip circumference, length of arm and forearm were measured using a measuring tape. The carrying angle was measured using a goniometer.

**Results:** The carrying angle was greater in females by 2.65º (p<0.001).The mean carrying angle in males was 11.5 º and in females was 14.5 º.The carrying angle in males on right side was 11.9 º and on left side was 11.1º.The carrying angle in females on right side was 14.7 º and left side was 13.6 º. The carrying angle was inversely proportional to the height of individual, hip circumference, length of arm and forearm (p<0.001).Conclusion: The carrying angle is significantly higher in females and also in the dominant upper limb. There is a negative correlation between the carrying angle and height of individual, hip circumference, length of arm and forearm.

**Key words:** carrying angle, goniometer, length of arm and forearm, height, hip circumference