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Variation of Range of Joint Motion in Bengalee (Indian) Healthy Adult Subjects

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ABSTRACT The present investigation was made to find out the effect of age and sex on Range of Motion (ROM) and gradation of ROM among healthy adults. A total number of 353 subjects (180 male and 173 female) having the age range of 19-60 years were selected at random from Bengali population of different districts of West Bengal for the study. The subjects were further classified into age and sex groups. A digital goniometer was used for the study. The results showed that there was no significant difference of ROM between right and left side of the body of both sexes' subjects. There was a significant difference of ROM among different age groups ($p<0.05$, $p<0.001$). In most of the body joint angles, a gradual decrease of ROM was observed with advancement of the age. According to the computed norms for each ROM, most of the subjects belonged to "C" grade (that is,'average') for both sexes. It can be concluded that gender wise difference in ROM may be attributed to the difference in activity level. Age related decrement of ROM may be related to the reduced flexibility of the body in older age and may be a helpful guide for designing different workstations.