

Assessment of Hamstring, Lower Back and Upper Body Flexibility in War Disabled Individuals in Sri Lanka North and East Region

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Abstract : During the 30 year civil war in Sri Lanka, a large number of individuals were injured and disabled. These disabilities have reduced their daily physical activities which may cause reduction in flexibility of upper limb, shoulder girdle, lower back and lower limb. Muscle flexibility is important for a healthy lifestyle. The main objective of the study was to assess the upper limb, shoulder girdle and lower back, hamstring flexibility of the intact lower limb in disabled individuals in the North and Eastern parts of Sri Lanka. Back saver sits and reach test and shoulder scratch test described in FITNESS GRAM was used in the study. A total of 125 disabled soldiers with lower limb disabilities were recruited for the study. Flexibility of the lower back and hamstring muscles of uninjured lower limb was measured using back saver sit and reach test described by Wells and Dillon (1952). Upper limb and shoulder girdle flexibility was assessed using shoulder stretch test. Score 0-3 was given according to the ability to reach Superior medial angle of the opposite scapula, top of the head or the mouth. The results indicate that 31 (24.8%) disabled soldiers have lower limb flexibility less than 8, 2 (1.6 %) have flexibility of 8, 2 (1.6 %) have flexibility of 8.5, 11 (8.8%) have flexibility of 9, 14 (11.2 %) have flexibility of 9.5, 23 (18.4 %) have flexibility of 10, 17 (13.6 %) have 10.5 flexibility, 13 (10.4%) have 11 flexibility, 2 (1.6%) have 11.5 flexibility, 10 (8 %) have flexibility of 12 and 3 (2.34 %) have flexibility of 12.5. Six disabled soldiers (4.8%) have upper limb flexibility of 2 and remaining 95.2% have normal upper limb flexibility (score 3). A reduction in the flexibility of muscles in lower body and lower limbs was seen in 25% disabled soldiers which could be due to reduction in their daily physical activities.

Keywords : disability, flexibility, rehabilitation, quality of life

Conference Title : ICSRD 2020 : International Conference on Scientific Research and Development

Conference Location : Chicago, United States

Conference Dates : December 12-13, 2020