

## Guttman-Type Scale of De Souza for Mobility Disability in Multiple Sclerosis

Overview: De Souza developed a Guttman-type scale for evaluation of mobility disability in patients with multiple sclerosis. The scale was developed in terms of biomechanics and the neural control of movement. The author is from Brunel University in England.

| Mobility   | Scale |
|--|-------|
| unsupported unilateral stance (stand on left then right foot for 5 seconds each) | 11    |
| unaided 50 meter walk  | 10    |
| rise from floor to standing without the aid of upper limb                        | 9     |
| get down to the floor from standing without the aid of the upper limb            | 8     |
| rise from unsupported sitting to standing without upper limb assistance          | 7     |
| walk 50 meters with aid  | 6     |
| walk 20 meters with aid  | 5     |
| unsupported standing for 30 seconds  | 4     |
| roll from supine to side lying in both directions                                | 3     |
| transfer from bed to chair without assistance                                    | 2     |
| can sit unsupported for 60 seconds   | 1     |
| cannot sit unsupported for 60 seconds  | 0     |

from Table 4 page 480.

Performance measures:

- coefficient of reproducibility: 0.95+
- Cronbach alpha for internal consistency: 0.88
- coefficient of scalability: 0.78 (for primary progressive); 0.74 (for relapsing-remitting)
- kappa for reliability (see page 479): ranged from 0.49 (1 item) to 1.0 (6 items)

References:

De Souza LH. The development of a scale of the Guttman type for the assessment of mobility disability in multiple sclerosis. *Clinical Rehabilitation*. 1999; 13: 476-481.