Name of Instrument: **Modified Gait Abnormality Rating Scale (GARS-M)**

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**Privacy Use Cost:** $
**Public Use Cost:** $

**Year Developed:** 1995

**Where to obtain Instrument:**
- Referenced article

**Description of the Instrument**
- The GARS-M is a seven item rating scale with a score range of 0 to 3 for each item.
- The GARS-M consists the 7 items in the following order: (1) variability, (2) guardedness, (3) staggering, (4) foot contact, (5) hip ROM, (6) shoulder extension, and (7) arm-heel-strike synchrony.
- The total GARS-M score is a sum of the seven individual items, and the total score represents a rank ordering of risk for falling based on the number of gait abnormalities recognized and the severity of any abnormality identified.

**Form of instrument:**
- Hazard/Risk Assessment Tools
- Other-in person videotaping of walk test

**Method of delivery:**
- In-person interview/assessment

**Relevance to injury/ Percentage of the instrument specific to injury**
- To predict risk of falling among community-dwelling, frail older persons.

**Time to administer or complete the instrument**
Methods of data analyses:
- Quantitative

Setting/sample instrument used in:
- 52 community-dwelling older male veterans who experienced difficulty managing daily activities and responsibilities needed for community dwelling.

Was it pilot tested? No

Pilot test sample:

Reliability Measures
- The ratings for the GARS-M by 3 raters were compared using the Kappa statistic in 3 ways: intrarater reliability, interrater reliability, and analysis of individual item scores.
- Intrarater reliability (comparison of individual scores for the seven items of the GARS-M by the same rater for two trials) for 3 raters are 0.493, 0.583, and 0.676.
- Interrater reliability (comparison of the three raters’ individual scores for all seven GARS-M items) is 0.577 for the first trial and 0.603 for the second trial.

Validity Measures
- The mean GARS-M score for participants with a history of falling is 9.0, higher than the mean GARS-M score of participants without a history of falling (3.8) ($t$=4.583; $df$=2.50, $p<.000$).
- Participants with a history of falls took shorter strides (mean average is 72.12 cm) than participants without history of falls (97.24 cm)
- Participants with a history of falls also walked slower (47.19 cm/s) than did the participants without a history of falls.
- Stride length and GARS-M have a negative correlation ($r$=-0.754); the shorter the stride, the more characteristics of risk for recurrent falls ($t$=-3.905; $df$=2.50; $p<.000$).
- Walking speed and GARS-M scores have a negative correlation ($r$=-0.679); the slower the speed, the more increased characteristics of the risk of falling ($t$=-3.359; $df$=2.50; $p<.002$)

Reference

Other References
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Keywords: elderly, seniors, falls, risk, walk speed, stride length.