Department of Occupational Therapy, College of Public Health and Health Profession

Exploring Walker Usage Among Older Adults: A Survey Study on Usage, Prescription, and Training

Yuan Li, MPH, Raghuveer Chandrashekhar, MS, Hongwu Wang, Ph.D.

BACKGROUND

- Walkers enhance mobility and reduce fall risks among older adults.
- Despite 11.6% of older adults using walkers, injuries and improper use persist.
- Fewer than 40% receive adequate training while structured education improves safety.

AIMS

- Investigate the barriers how older adults acquire, use, and maintain walkers.
- Assess the relationship between user satisfaction, injuries, and challenges related to walker usage.

METHODS

- Cross-sectional survey (18 questions modified from wheelchair user survey)
- Question asked user profile, assessment training process, maintenance/usage accidents
- Recruitment via local senior center, UF Oak Hammock, and Village at Gainesville. Provide walker maintenance and safety education.
- Ethics Approval: IRB exempt, UF Protocol #ET00020302.
- Inclusion: 60+ years, walker users (no/electric wheels excluded).
- Survey data collected via REDCap, phone interviews, and paper forms (Sep 2023-Aug 2024).
- Analysis: Descriptive statistics, Chi-square, and Fisher's exact tests.



Figure 1. Research Assistants survey intake at Gainesville Senior Center

RESULTS

Sample size (N)	Age range	N (%)	Duration of Walker Use	N (%)	Reason for Using a Walker	N (%)
47	40-59 years	2 (4.3)	0 – 4 years	33 (70.2)	Musculoskeletal	19 (40.4)
	60-74 years	10 (21.3)	5 – 9 years	12 (25.5)	Neurological	8 (17.0)
	75+ years	35 (74.5)	10 – 19 years	2 (4.3)	Other (age, surgery, neuromuscular, etc.)	20 (42.6)

Table 1. Participant Characteristics

Participant Characteristics

- Majority (74.5%) were aged 75+, with 70.2% reporting walker use for less than 4 years.
- Most commonly used device: 4-wheel walker (78.7%).

Assessment and Training

- Significant gaps in maintenance **education** (**87.2%** lacked written instructions). Among those primarily from therapists (61.5%) and PCPs (23.1%).
- Just 51.1% received training or support on how to use their walker. Satisfaction remained high (87.2%) despite inconsistencies in training and referral.

Walker Maintenance and Injury

- 87.2% received no written instructions; 97.9% had no written support materials.
- Walker-related **injuries** reported by **23.4%**, mostly **strains/sprains** (17.0%) followed by bruises or abrasions (6.38%).
- The most affected injured area the arms or hands (12.77%) and the trunk or back (10.64%).

Outcome	Age (Fisher's exact)	Living condition (Fisher's exact)	Referral	Training
Satisfaction	p-value= 0.7	p-value= 0.20	X-squared = 1.53e-30 p-value = 1 OR= 0.73	X-squared = 2.41e-31 p-value =1 OR =1.60
Injury	p-value= 0.68	p-value= 0.50	X-squared = 0.019 p-value = 0.8924 OR=0.69	X-squared = 0.059 p-value = 0.81 OR= 1.71
Difficulty	p-value= 0.14	p-value= 0.16	X-squared = 0.43 p-value = 0.51 OR= 2.0	X-squared = 0.12 p-value = 0.72 OR=1.69

Table 2. Chi-Square and Fisher's Exact Test Results Summary Referral and Training vs. Outcomes

- Both referral (OR = 2.0) and training (OR = 1.69) were associated with higher odds of reporting difficulty, though these results were not statistically significant.
- No statistically significant association found between referral/training and outcomes (satisfaction, injury, difficulties).

CONCLUSIONS

- Despite a high overall satisfaction rate (87.23%), lack of structured training and professional assessment highlights critical gaps in walker prescription, education, and injury prevention.
- No significant associations were found between training/referral and user outcomes (satisfaction, injury, or walker difficulty) among our sample. Selection Bias, sampling method, skewed sample.
- Critical need for structured assessments and maintenance written guidance.

KEY TAKEAWAYS

- Most walker users receive little to no formal assessment, training, or maintenance education.
- In need of standardized assessments ensure optimal walker match and personalized setting.
- Lab committed to develop educational programs and practical guidelines. Starting from walker survey, the biomechanical analysis, develop structure guideline.

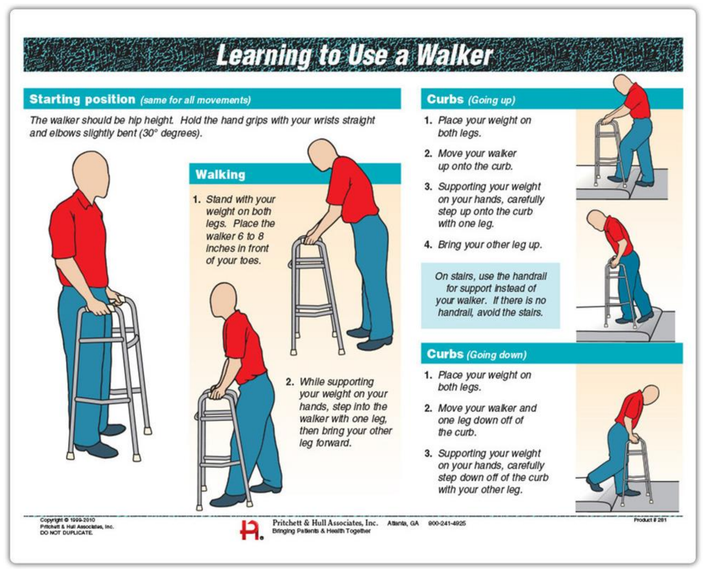


Figure 2. Training guidelines example for using no wheel walkers

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