

Can a Family Caregiver Provide an Evidence-Based Falls Prevention Intervention to the Person with Cognitive Impairment or Dementia They Care For? Victoria Panzer PhD, Veronica Smith MA PT, Dorothy Wakefield MS, Joanne Maher MSW, Carolyn Ham MPH and Richard Fortinsky PhD



Key Points- Family Caregivers participating at-home in an adapted falls prevention intervention reported many new falls prevention behaviors, significantly decreased falls and annual fall rates matched or bettered those achieved by residential care professionals

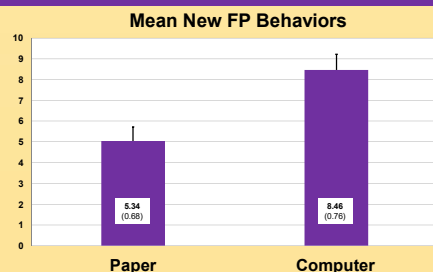
Background

Falls are a common reason that persons with cognitive impairment or dementia (PwCID) cannot remain at home. FallsTalk™ is a 1 month evidence-based falls prevention (FP) intervention shown to encourage new FP behaviors¹ and decrease falls². FallsTalk was adapted for family Caregiver (FCG) administration to a PwCID with recent falls.

Methods

Thirty-four Dyads (FCG+PwCID) were trained to conduct brief daily at-home FP discussions together using FallsTalk methodology and randomly assigned to receive either standardized (**Paper-** FallsTalk, n=14) or tailored³ (**Computer-** FallsTalk-Caregiver, n=20) discussion suggestions based on prior falls-related concerns expressed by the FCG. All Dyads had standard FallsTalk training, daily discussions together and received weekly check-in calls from a FallsTalk Facilitator. Using an anonymous study ID, FCGs reported weekly on occurrence of falls and any new FP behaviors; as well as any changes in the PwCID's health, care or living arrangements during the intervention period on a secure web-site. FCGs continued weekly web-site entry of falls and status changes, until either a medical (significant health status change) or residential (permanent change) endpoint was reached, or 52 weeks were completed. Poisson regression models compared the number of **new FP behaviors** (intervention month) and weighted **weekly fall rate** (Dyads participating ≥ 12 weeks) between groups. Fall rates were then annualized for comparison with published residential care fall rates⁴.

Results- New Falls Prevention Behaviors



Study Dyads receiving FallsTalk-Caregiver reported **significantly more (p=.004) new FP Behaviors** during the intervention month.

Results- Weekly Fall Rates: At-home Dyads Only

Falls per week (Dyads ≥ 12 weeks)	Paper (Standard FallsTalk- FT)	Computer (Tailored FT-CG)
Number of Dyads	13	19
Mean (SE)	0.073 (0.015)	0.040 (0.008)
95% Confidence Interval	(0.049, 0.109)	(0.027, 0.060)

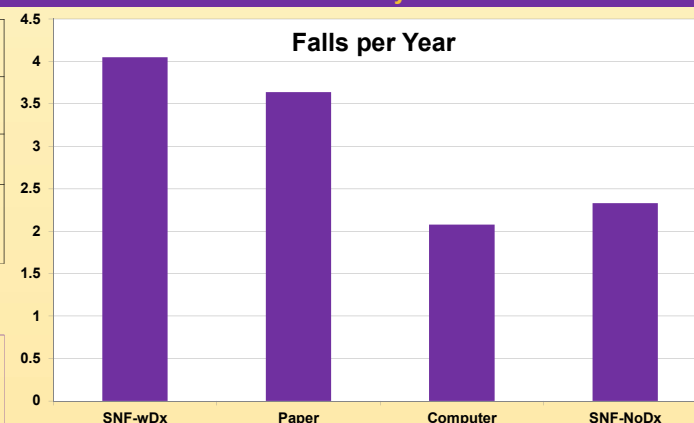
Fall Rates- Study Groups

Falls per week- (Dyads participating ≥ 12 weeks) PwCIDs experienced a **significantly lower fall rate (p=.047)** when their FCGs utilized the FallsTalk-Caregiver (**Computer- FT-CG**) tailored intervention, compared to those who received the standardized FallsTalk (**Paper- FT**) intervention.

Conclusions

- **FallsTalk-Caregiver** provides an effective means to encourage new Dyad falls prevention behaviors, decreasing the falls rate in PwCID.
- **Computer tailored discussion suggestions** resulted in significant improvements overall.
- Despite the diverse Dyad home environments and varied PwCID diagnoses, FCGs were able to **match or better the annual fall rates** that are achieved by professional caregivers in a controlled skilled nursing facility (SNF) setting⁴.

Annual Fall Rates: At-home Dyads vs. Residential Care



Annualized Fall rates of study Dyads are flanked by reported rates for SNF Residents with (**SNF-wDx**) and without a diagnosis of cognitive impairment or dementia (**SNF-NoDx**)⁴.

References

- 1- Panzer VP, Burleson J, et al. Can a multimedia fall prevention treatment program change behavior and prevent falls? JAGS, 2008; 56: S167.
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- 3- Schepens SL, Panzer V, Goldberg A. A Randomized Control Trial Comparing Tailoring Methods of Multimedia-based Fall Prevention Education for Community-dwelling Older Adults. AJOT, 2011; 65: 702.
- 4- Van Doorn C, Gruber-Baldini AL, et al. Dementia as a Risk Factor for Falls and Fall Injury among Nursing Home Residents. JAGS, 2003; 51: 1213.

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