STEPPING ON: CANCER EDITION
Changes Behaviors and Improves Balance in Older Adults with Cancer and Caregivers

Tanya Wildes, MD, MSCI
November 16, 2019

Theresa Cordner, CRC
Jan Hungerford, RN
Heidi Tymkew, PT, DPT, MHS, CCS
Behnaz Sarrami, Pharm D

Marian Keglovits, OTD, MSCI, OTR/L
Emily Somerville, OTD, OTR/L
Ryan Duncan, PT, DPT
Lindy Clemson, OT, PhD
STEPPING ON: CANCER Introduction

- **Intervention**
  - 7-week group-based self-management fall-prevention

- **Previous work:**
  - Stepping On: Cancer
  - adapted to the needs of older adults with cancer
  - feasible
  - changes behavior relating to fall-risk in older adults with cancer

- **Objective:**
  - To determine if this intervention improves gait & balance in older adults with cancer and their caregivers.

**Inclusion:**

**Patients** aged ≥65
- Receiving systemic therapy or experiencing side effects of cancer/ treatment
- Reported a fall or fear-of-falling

OR self-identified care partner of a participating patient

*Caregivers were included in this stage given prior observations of subjective benefit of their participation.*
Methods

- MiniBESTest
- Timed Up and Go
- Falls Behavior Scale
- Falls Efficacy Scale

MiniBESTest
- Anticipatory postural adjustments
- Postural responses
- Sensory orientation
- Dynamic gait

Photo from www.ispgr.org
**Conclusions:**

- Participation in Stepping On: Cancer Edition was associated with improvement in *balance* and *behaviors* to reduce fall-risk in a cohort of older adults with cancer and their care partners.
- Future study will be required to determine if the program prevents falls in this population.

**RESULTS**

- 14 participants enrolled (9 patients, 5 caregiver)
- Mean age 75.6 (range 70-84)
- 50% were female
- Cancer types: prostate 3 (21.4%), gastrointestinal 3 (21.4%), myeloma 2 (14.3%), and breast 1 (7.1%)
- 6/9 patients were receiving active treatment: 1 endocrine, 3 chemotherapy, 2 targeted agents

![MiniBest Balance Test Pre-/Post-intervention](image)

<table>
<thead>
<tr>
<th>Change in physical performance, falls-efficacy and falls behaviors with Stepping On: Cancer Edition</th>
<th>Baseline</th>
<th>Post-program</th>
<th>Change</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timed Up and Go</td>
<td>12.2±4.1</td>
<td>11.0±2.0</td>
<td>-1.3±2.9</td>
<td>0.12</td>
</tr>
<tr>
<td>Falls Behavior Scale</td>
<td>2.4±0.6</td>
<td>2.7±0.4</td>
<td>0.27±0.31</td>
<td>0.006</td>
</tr>
<tr>
<td>Falls Efficacy Scale</td>
<td>22.6±6.3</td>
<td>21.7±5.9</td>
<td>0.9±3.4</td>
<td>0.33</td>
</tr>
</tbody>
</table>