

Upright and Walking Light!

Falls prevention through Functional Exercise



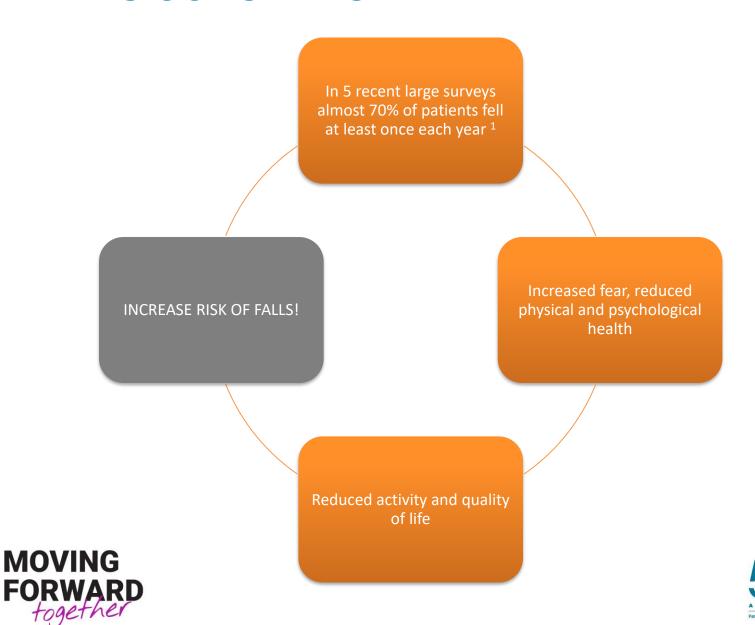
LEARNING OBJECTIVES

- Participants will leave with an understanding of how to evaluate the cause/category of potential/past falls
- Participants will learn practical tools to help jump start their falls prevention program and reduce the fear of falling.
- Participants will leave feeling informed on the benefits of exercise for falls prevention
- Participants will leave motivated to begin or continue a challenging functional exercise program!





THE FALLS CONUNDRUM



THE FALLS CONUNDRUM - WHAT DO WE DO?

Medication

- Reduced postural control and falls do not respond to medication²
 - Important for on off times, BP etc..

FUNCTIONAL EXERCISE

substantial evidence showing that regular exercise is important to maintain postural control, mobility, general symptom management.17,18

Environment





NOT FALLING YET?

- Great! Don't wait until you are!
- Prevention is key!





FALLS PORTFOLIO

HOW

Backwards

Orthostatic Hypotension

Freezing of gait

Foot catch/ Dystonia

WHEN

Medication management

Planning - when are you doing what in your day

Fatigue

DUAL TASKING

WHERE

- Indoors
 cats, carpets,
 couches, corners
- Outdoors
 groups, gait aids,
 gradients





FALLS PORTFOLIO - HOW

HOW

Backwards

Orthostatic Hypotension

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HOW – 1. BACKWARDS FALLING

- "retropulsion"
- Exercise based treatment
 - Foot to floor connection
 - Backwards responsive stepping
 - Ankle strategy
 - Backwards rolling
 - Dynamic stepping exercises! Ladder, Multidirectional Lunges,





HOW – 2. ORTHOSTATIC HYPOTENSION

- Blood pressure drop
- Head down to up, sit to stand, lie to stand
- Ankle pumps
- HYDRATION
- 5 second countdown
- Dynamic exercise separating levels Lying, kneeling, standing





HOW - 3. FREEZING OF GAIT

- 4S's
- HIGH KNEES!
- Rhythm & Music
- Practice practice + pre-emptive preparation





4. FOOT CATCH/ DYSTONIA

- Hurdle training
- Dorsiflexors assessment and treatment





FALLS PORTFOLIO - WHEN

WHEN

Medication management

Planning - when are you doing what in your day

Fatigue

Dual Tasking





TRAIN YOUR BODY, CHANGE YOUR BRAIN.

WHEN: DUAL TASKING!

- PD patients require more cognitive focus for motor tasks, this puts you at risk when trying to dual task
- TRAIN THAT BRAIN!
 - Squats with animals
 - Walking and talking maintain rhythm
 - Lateral steps + multidirectional reaches (grabbing a cup dishes etc..)





FALLS PORTFOLIO - WHERE

WHERE

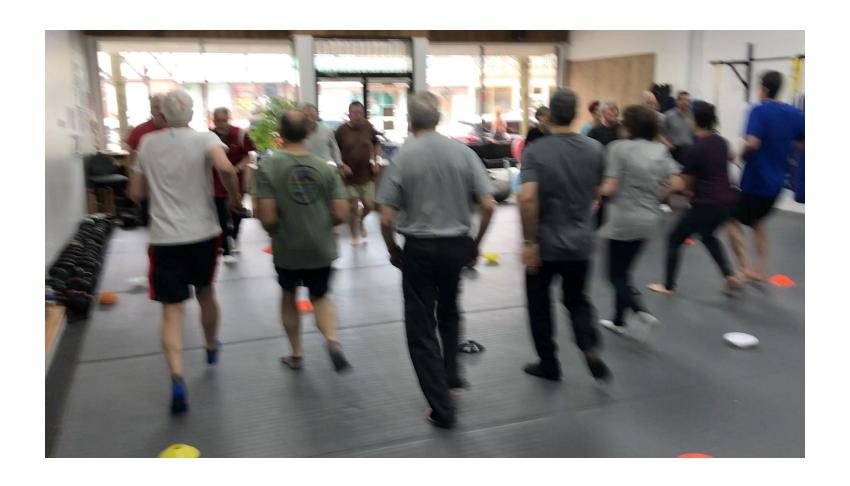
Indoors
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BUSY SPACES – TRAIN IT!







FEAR OF FALLING

- Fear of falling leads to reduction in activity and increased RISK OF FALLS!
- Learn how to fall with confidence! Do the exercises discussed previously, contact a PT if you want to learn proper falling technique
- VIDEOS.

















TAKE HOMES

- Get assessed! Specific Exercise and Physiotherapy CAN help
- Determine your FALLS PORTFOLIO
- Functional exercise is KEY for prevention and management!
- The earlier you start the better so lets get going!



TAKE HOMES/FINAL THOUGHTS

- Get assessed! It can help reduce falls now and in the future!
- Functional exercise is key
- Determine your falls portfolio
- START NOW!

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Free Resources: www.neurofitbc.com/move





REFERENCES

- 1. Grimbergen, Y. A., Munneke, M. & Bloem, B. R. (2004).
 Falls in Parkinson's disease. Current Opinion in Neurology, 17(4), 405-415. doi: 10.1097/01.wco.0000137530.68867.93
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