

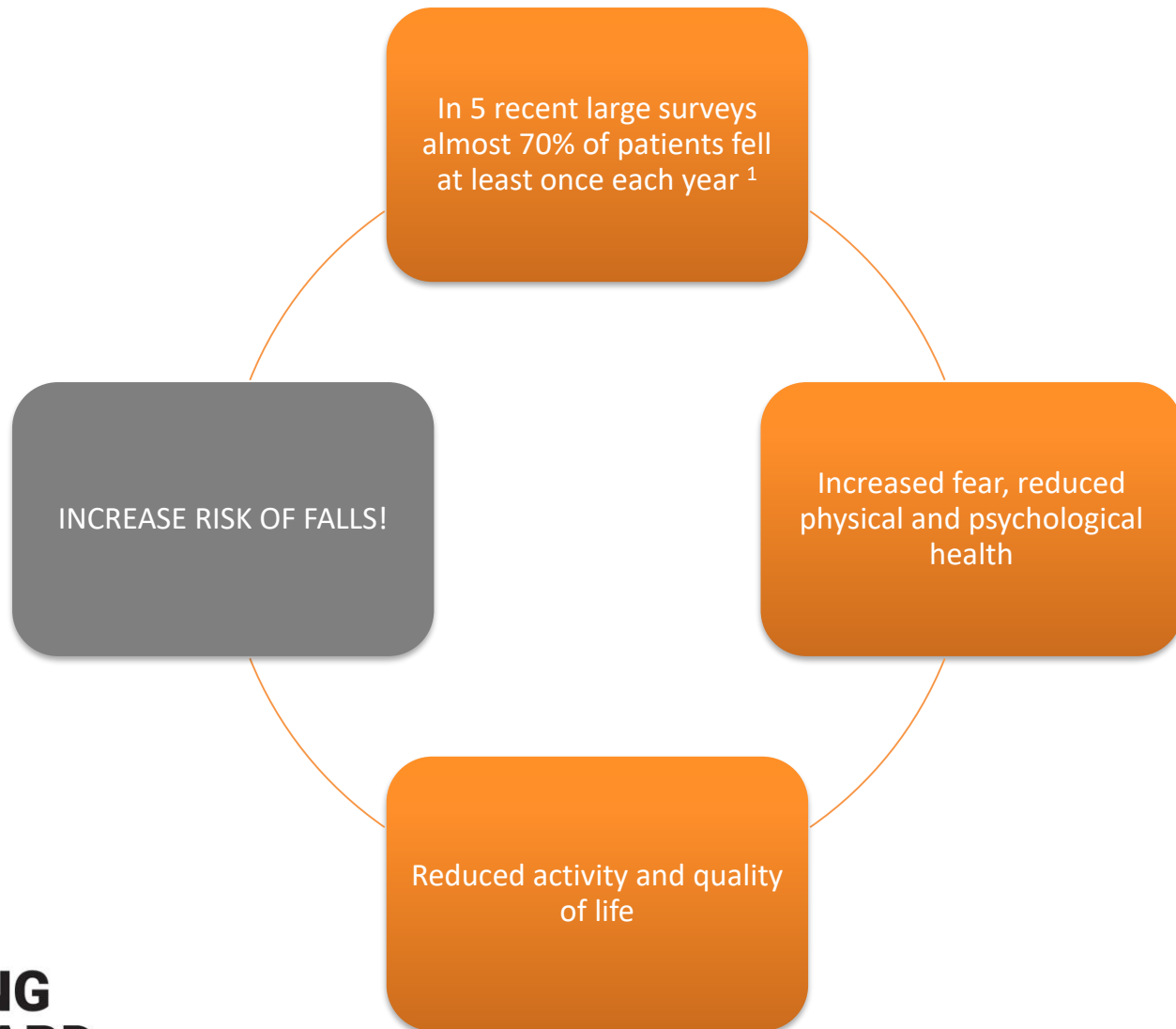
Upright and Walking Light!

Falls prevention through Functional Exercise

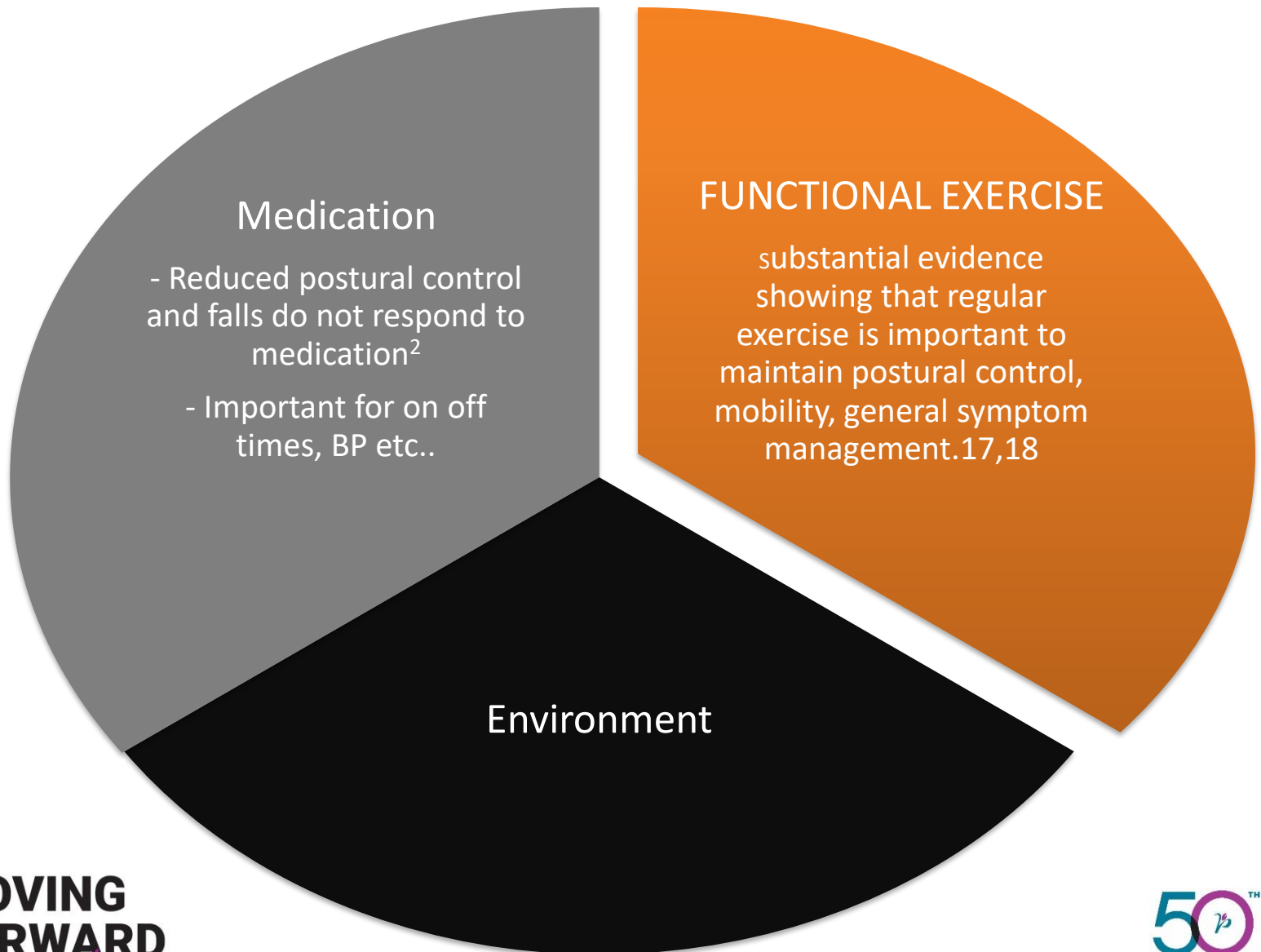
LEARNING OBJECTIVES

- 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?



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

Freezing of gait

Foot catch/ Dystonia

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 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



NEUROFIT BC

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

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!

Naomi Casiro

BSc.(Kin), MPT, Certified PWR! Therapist

Email: info@neurofitbc.com

Phone: 604 345 9318

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
- 2. Jankovic, J. (2002). Levodopa strengths and weaknesses. *Neurology*, 58(4), S19-S32. doi: 10.1212/WNL.58.suppl_1.S19.
- 3. Bloem, B. R., Hausdorff, J. M., Visser, J. E. and Giladi, N. (2004), Falls and freezing of gait in Parkinson's disease: A review of two interconnected, episodic phenomena. *Mov. Disord.*, 19: 871-884. doi:[10.1002/mds.20115](https://doi.org/10.1002/mds.20115)
- 4. Bloem, B., Valkenburg, V., Slabbekoorn, M. et al. *Exp Brain Res* (2001) 137: 478. <https://doi-org.ezproxy.library.ubc.ca/10.1007/s002210000672>