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Living well with Parkinson's through Exercise

Understanding the impact of Nordic walking for People with Parkinson's

Sarah McCracken

Parkinson's Disease Nurse Specialist

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Overview



Nordic Walking & Parkinson's

Nordic Walking interventional study- Results

Focus group study - Results

What next?

My journey

- ▶ Nursing degree (BSc) 33 years ago
- ▶ Parkinson's Nurse Specialist for 19yrs
- ▶ Special interest in neurology, rehabilitation and community nursing
- ▶ Nordic walking Instructor 2019
- ▶ Feasibility study 2021 (article and poster)
- ▶ M.Phil. 2021-2023
- ▶ Graduated July 2024



What is Parkinson's (PD)?

- ▶ Fastest growing neurological long-term condition globally
- ▶ Degeneration of nerve cells in the substantia nigra (brain)
- ▶ Leads to a reduction in neurotransmitter **DOPAMINE**
- ▶ Impacts movement, mood, memory, attention, motivation, and pleasure
- ▶ More than 145,000 people living with PD in the UK
- ▶ Many people with Parkinson's (PwPs) are looking for alternative interventions to supplement complex medication regimes



Nordic Walking and PD

- ▶ Nordic walking poles promote better posture and stability
- ▶ Poles can improve walking speed and cadence (stride)
- ▶ Exaggerated movements of arms and legs
- ▶ 10 years ago, a woman with PD attended a conference and persuaded her local Parkinson's UK branch to work with a NW instructor and physiotherapist(feasibility study), Blake, 2014.



NW and Parkinson's



Big amplitude movements

Whole body workout

Research suggests it can improve balance, gait, posture and speed of movement

Well-being and non-motor benefits

Exercise could be neuro-protective

Could improve balance and reduce falls

Potential cost saving to the NHS

Understanding the impact, accessibility and diversity of NW in People with Parkinson's

- ▶ 8-week NW intervention (13 months)
 - ▶ Recorded motor & non-motor outcomes at week-0, week-8 and 6-months (Repeated measures)
 - ▶ Physical measures (3 metre timed up and go, 10m and 20m walk test, Tragus to wall/ posture)
 - ▶ Non-motor symptoms scale questionnaire, 30 items.
 - ▶ Field notes
- N=53 People with Parkinson's





Demonstration

1. Posture
2. Lean
3. Walk
4. Rotate
5. Drag
6. Place
7. Push
8. Extend fully
9. Release Actively
10. Swing forward



Results (Repeated measures study).

**Paired t-tests
were carried out
to compare
outcomes after 8
weeks and 6
months
(SPSS software)**

**Statistically
significant
improvements in
10 and 20 m walk
test (speed and
cadence), Timed
up and Go (speed),
and Tragus posture**

**P values
< 0.001**

**Non-motor symptoms
scale questionnaire.**

**Statistically significant
improvements in
overall score**

**Improvements in
sleep and fatigue,
mood and cognition,
some urinary
symptoms**

**Age range of
participants**

47-83yrs

**Hoehn and Yahr stage
1-4**

**Years since
diagnosis
1-15 years.**

Focus Groups

Research Question:

What are the characteristics needed to implement NW groups for People with Parkinson's in a community rehabilitation setting?

Design: **Three Focus Groups (15 people in total, PwP, NW instructors and walk leader).**

Record and
transcribe

Coding

Thematic
analysis

Behaviour
Change
wheel

Future
practice

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Results

- ▶ Six main themes
- ▶ 1. Nordic walking is **physically beneficial** for PwP
- ▶ 2. **Social benefits** of group interaction
- ▶ 3. **Practical components**: parking, toilets, café, timing, public transport, access
- ▶ 4. Qualities and characteristics of the **NW instructor**
- ▶ 5. Optimising **group safety**, risk assessments, PARQ adapted/COVID
- ▶ 6. **Facilitators** for setting up new community NW groups; partnerships

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Quotations

I think it was picking up from where you stopped. It was the fact that we could all meet up and be outside and get fit!” (PwP)

My classes are in the morning because they are up and ready and took all their pills, so we go at 11 o’clock”. (NWI)

Yes, it worked both physically and mentally, It has been good to meet other people that are active (PwP)



I think you feel comfortable, asking about Parkinson’s. That would be important, because of the knowledge and experience Sarah has in people with Parkinson’s (PwP)

I feel if I do something like parkwalk, I have achieved a goal. If you have got motivation, that is always a good thing. Running is not my thing. (PwP)

It was the fact that we could all meet up and be outside, get fit. Much better than Zoom!” (PwP)

P.A.R.K.I.N.S.O.N.'S.

P

Physical activity

A

Adventure not Apathy

R

Reconditioning and not Deconditioning

K

Kindred spirits. Exercising with new friends and their spouses/ partners.

I

Inclusive. NW is available to people of all ages and different backgrounds.

N

Non-motor benefits (improved sleep, mood, motivation, less pain and constipation)

S

Sporty poles, not walking aids.

O

Outdoors and all the benefits of exercising in the green gym/ healing balm effect.

N

Nature and wellbeing

‘

Belonging. One of the first sports to start after Covid lockdown

S

Social



What next?



M.Phil.
Graduation



Focus Group journal
article for publication



Present findings at
conference



Grant application to
conduct RCT of NW for
PwP
Non-motor impact



Explore other areas for
NW 'reach' e.g.,
parkwalk



Business case for
continued clinical NW
groups



“

Chris was a participant and former PE teacher. She is now an instructor, inspiring and motivating others!”





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Disclaimer

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British Nordic Walking

CityCare

Parkinson's UK, local and National

Dr Booth, Dr Allen and Prof Logan

My family - Being there, every Nordic step!

The participants, especially Christine, NW instructors and walk leaders
Trent Bridge Rotary Club



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Any Questions?



CEO Catherine Hughes, British Nordic walking, Chris, Caroline Russell, CEO Parkinson's UK, Me!



Parkrun with the CEO!

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My Medical Background

At 29 I was diagnosed with Hodgkin's Lymphoma, treated but relapsed age 31 had an autologous bone marrow transplant.

Had 2 beautiful children against the odds
Life was good but then I had another fight on my hands!

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Is there a link?



I'm alive and determined



- Since my diagnosis 6 and a half years ago, I have been determined to live well with this disease of 40+ symptoms!!
- It isn't easy, it actually 'sucks', but what is the alternative?
- My life has been enriched in so many ways since my diagnosis.....Many doors have closed but many have opened.



Adapting to the new me!

- From the onset I have been determined not to be defined by my diagnosis
- I was extremely fit when diagnosed, so feel I had a good chance through exercise to slow down PD progression, which I believe has happened.
- I feel lucky that I was facing this new challenge already armed to fight!!

Adapting

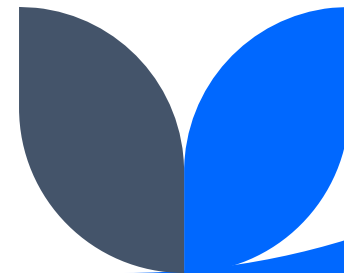
I decided from the start, after the initial shock to cope with my diagnosis head on!

- I joined the 10-week warrior class at the city hospital
- Started ballet and yoga classes
- Continued running and swimming
- Started painting
- Got involved with Parky Players
- Completed my British Nordic Walking instructor's course.
(1st woman with PD to have done so).



‘We are undefeatable’

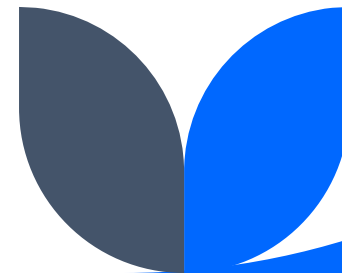
- Parkinson’s UK supported my journey.
- They asked me to apply for the ‘We are undefeatable’ campaign (encouraging individuals with chronic health conditions to exercise).
- Developed by 15 leading health and social care charities and backed by expertise, insight and significant National Lottery funding from **Sport England**.
- The most humbling experience.....they came to film me for a full day.



My most humble achievement

In October 2023, I was encouraged to take part in a research program for Nordic Walking introduced by Sarah, for people with Parkinson's.

- I was one of 53 participants and one of the last to join
- Fate played its part.....
- I loved it!





Nordic Walking

- Within a couple of weeks, I was taking the warmups/cool downs.
- From the onset Sarah was trying to encourage me to think about doing the leaders or instructor's course.
- Catherine the CEO of British Nordic Walking contacted me and encouraged me to complete the instructor's course, the rest is history!



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Lakeside and Southwell Nordic Walking

- I started 2 groups, one at Nottingham University where the research program was initiated and one in Southwell, where I live.
- Lakeside now has 26 members with PD at all stages, plus carers.
- Southwell has a mixed group of 25 some with PD and able bodied.
- The success of both groups has been truly wonderful with retention of participants and new additions.





10/9/2021



Live well with Parkinson's

- We know that Parkinson's Disease for every individual is unique, but we need to take control of how we manage to live with this progressive, degenerative disease. You can live well with PD.
- I intend to **accept, adapt, and have ambition.**
- I have a purpose to give something back to the PD community while I am fit and healthy.
- I will deliver Nordic Walking to those with and without PD for as long as I am able. It's given me a real purpose in my life as I navigate living well with the disease.



A close-up photograph of an artist's hands painting a large, vibrant pink hydrangea flower on a canvas. The background of the painting is a textured blue. The artist is wearing a blue and white patterned shirt and is using a paintbrush to apply pink paint to the flower. The scene is set in a studio with other paintings visible in the background.

CHRISTINE

<https://www.youtube.com/watch?v=moRobIEzdrc>

We are Undefeatable



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Thank you!
Q and A....

