

Physiotherapy works ✓

Physiotherapy, delivered as part of a multidisciplinary approach, provides physical and psycho-social benefits for people with Parkinson's.

Parkinson's

What is Parkinson's?

Parkinson's is a progressive neurological condition characterised by motor and non-motor problems. The main changes arise from brain dysfunction through reduced production of chemical messengers particularly the neurotransmitter dopamine.⁽¹⁾

The three main motor (movement) symptoms are bradykinesia (slowness), rigidity (stiffness) and tremor.⁽¹⁾ Diagnosis is usually based on clinical examination. People with Parkinson's might present with falling, loss of confidence and independence and reduced quality of life.^(1,2)

Drug therapy and deep brain stimulation can provide partial relief of symptoms but many people require additional support from allied health interventions including physiotherapy,

rated as a top priority by respondents to the Membership Survey conducted by Parkinson's UK.⁽³⁾

Physiotherapy

Physiotherapy involvement is supported by a growing evidence base of high quality research, which is informing best practice guidelines.⁽²⁾ Short-term

patient benefits in a range of physical and quality of life measures have been identified through systematic reviews.^(4,5,6)

Physiotherapy assessment and management focuses on improving physical capacity and quality of movement in daily life through walking and transfer training, balance and falls education, and practice of manual activities (e.g. reaching and grasping). Other issues e.g. pain, well-being, respiratory function and support networks may need attention.⁽²⁾ ▶▶

Epidemiology

In the UK:

- **127,000** people diagnosed with Parkinson's⁽⁹⁾ makes it the second most common neurological disorder in the UK.⁽⁹⁾ With the population ageing, these numbers will double by **2030**⁽²⁾
- Diagnosis is mainly in the **over 55's**, but increasingly seen in younger people
- An estimated **4-20/100,000** people are newly diagnosed each year⁽¹⁰⁾
- **1/500** people are affected, with prevalence increasing with age; **1.4%** over 60 and **4.3%** over 85 years⁽²⁾
- Incidence is **1.5 times** higher in males than females.⁽²⁾

Best practice tariff only payable if Physiotherapy is included.

The two main areas of Parkinson's-specific physiotherapy intervention relate to exercise and movement strategy training.⁽²⁾

During the earlier stages, physiotherapists emphasise education and self-management encouraging use of leisure and third sector programmes that promote general fitness and inclusion in community activity. Physiotherapy-specific exercise can offset the effects of Parkinson's to minimise deterioration in strength, endurance, flexibility and balance.

As the condition progresses, physiotherapists teach and apply movement strategies to overcome difficulty in generating automatic movement and thought, including developing strategies to compensate for loss of function, using external (auditory, tactile, visual and sensory) or internal (mental rehearsal and visualisation) cues, dual task training, self-instruction and improving attention span.

Conclusion

Physiotherapy is essential in the multidisciplinary management of people with Parkinson's. Advice and education offered in the early stages maintains general

fitness, minimises deterioration and promotes self-management. In the later stages, physiotherapy can improve gait, balance, transfers, manual activities and reduce the falls risk.

Cost of ill health



- NICE estimated cost of physiotherapy at **£156 per person** in first year and **£25 annually** thereafter.⁽¹¹⁾
- The best practice tariff of **£672** per incident person is only payable if physiotherapy is offered.⁽¹²⁾
- Targeted exercise programmes versus usual care have been shown to reduce costs by an average of **£292**.⁽¹³⁾
- Community-based expert physiotherapists, delivering evidence-based interventions, reduced health care costs by **£727** compared to usual care.⁽¹⁴⁾

Case study

Over a six month period, the introduction of a Derby Parkinson's multidisciplinary team (MDT) delivered an integrated holistic and seamless service, aiming to enable people with Parkinson's to remain living in the community and as independently as possible.

They run a national training programme for management in Parkinson's/Parkinsonism and a consultant-led weekly MDT Parkinson's clinic.

The specialist physiotherapist provides evidence-informed assessment and rehabilitation, individually and in groups. A specific measure - Lindop Parkinson's Assessment Scale (LPAS)⁽⁷⁾ was developed to monitor alterations in function and falls risk.

The team has shown that effective MDT interventions for Parkinson's in-patients can reduce length of stay by 4 days and improve patient satisfaction.⁽⁸⁾

Further information

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Acknowledgements

Bhanu Ramaswamy Independent Physiotherapy Consultant, Dr Anna Jones, Reader Northumbria University, Fiona Lindop Clinical Specialist Derby Hospitals NHS Foundation Trust and Dr Victoria Goodwin, Senior Research Fellow, University of Exeter Medical School

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