Physiotherapy in Parkinson’s Disease
Insight in current care throughout Europe

**INTRODUCTION**

Physiotherapy is often used complementary to medical treatment in Parkinson’s disease (PD). The KNGF guideline for physiotherapy in PD serves as a decision supporting tool in this field. It is available for free, in Dutch and English. Currently, we are updating this evidence-based guideline into a European Guideline. As starting point for the development of the European guideline, we aimed to gain insight into:
- current care
- barriers & facilitators to optimal care

**METHODS**

A survey was developed based on similar surveys and the Dutch national guideline for physiotherapy in PD, in collaboration with the Association for Physiotherapists in Parkinson’s disease Europe (APPDE). The survey was made available:
- web-based
- in 11 languages
- set out in 17 countries
- to 9,646 physiotherapists

In each country, 600 randomly selected members of the national physiotherapy association were invited to participate. For associations with less than 600 members in total, all members were invited. Therapists who did not want to fill in the survey were asked to only inform us about their treatment volume of PD patients in the past 12 months. Therapists with a treatment volume >4 were expected to have more PD-specific expertise (‘expert’) and therefore asked to fill in additional questions (e.g. on measurement tools and interventions).

**RESULTS**

**Response**

3,405 physiotherapists participated (35.3%)

**Treatment volume**

Of physiotherapists who had treated at least one PD patients the foregoing year (84%), the median treatment volume was 4 (50%) ranging from 2 to 7. Country specific median treatment volume ranged from 2 to 5. According to the therapists, the median optimum needed treatment number to gain and retain sufficient expertise was 10 (with 50% of the answers ranging from 6 to 20).

**Self-perceived expertise**

Only 16% of the therapists classified their levels of PD specific competence as (very) high (Fig.1). This was higher the group of ‘expert’ therapists (26%).

**Use of measurement tools**

Even though the majority of ‘expert’ therapists (75%) reported that measurement tools support clinical reasoning, treatment planning and evaluation (reports), 40% did not use measurement tools for either assessment or evaluation. Country specific use of tools ranged from 20% to 100% (but beware, small numbers). Main barriers for the use of measurement tools were:
- lack of time (32%)
- insufficient knowledge & skills (29%)
- difficulty interpreting results (25%)
- unavailability of tools (23%)

Tools mostly used were the Timed Up and Go, Berg Balance Scale, 10 Meter Walk, Timetti Balance & Gait, and 6 Minute Walk.

**Barriers to optimal care**

The most important barrier in delivering optimal care was limited PD-specific skills (table 1). Only 9% reported experiencing no barriers. To the ‘expert’ therapists, experience was less of a barrier (31%), but referral at too late a stage even more (43%).

**Patients**

Even though physiotherapy is important from the onset of the disease, most of the patients treated were in the mid phase of disease progression (Fig. 2).

**Interventions**

Two out of the four strongly evidence-based interventions available, are applied by less than 60% of the therapists (Table 4, no. 1-4). The majority of therapists (55%) often do always train the performance of double tasks when these endanger safety, whereas it is recommended to train to avoid these.

Moreover, for most interventions, only just over 50% of the therapists feel above average to highly competent applying them.

**CONCLUSION & DISCUSSION**

Many physiotherapists treat PD patients, but do not find themselves competent doing so.

In general, their treatment volume is low, many do not use measurement tools and lack to apply specific interventions for which evidence is strong.

The future European guideline should be made available in many languages.

Implementation of this guideline should aim to:
- increase evidence-based knowledge and skills
- endorse timely referral
- increase patient volume
- improve communication amongst care providers

**REFERENCES**


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