

Physiotherapy in Parkinson's Disease

Insight in current care throughout Europe

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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.¹ 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%)

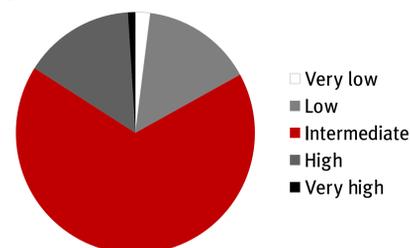
Treatment volume

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%).

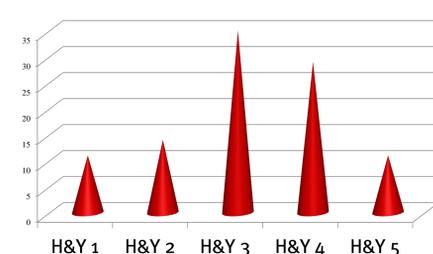
Fig 1. Self-perceived PD competence therapists (%)



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)

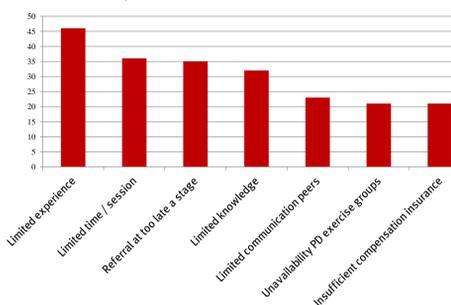
Fig 2. Hoehn & Yahr classification patients (%)



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%)

Table 1. Reported barriers (%)



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%)**

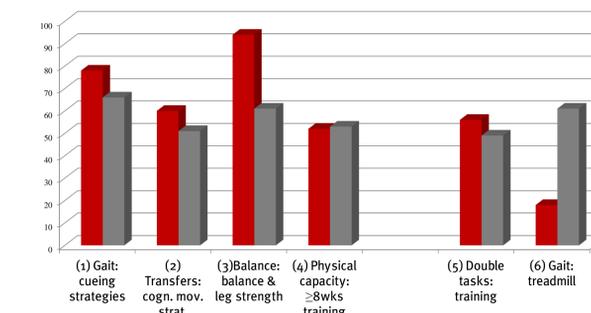
Tools mostly used were the Timed Up and Go, Berg Balance Scale, 10 Meter Walk, Tinetti Balance & Gait, and 6 Minute Walk.

Interventions

Two out of the four strongly evidence-based interventions available¹, are applied by less than 60% of the therapists (Table 4, no. 1-4). The majority of therapists (56%) often to always trains the performance of double tasks when these endanger safety, whereas

it is recommended to train to avoid these.

Table 3. % of therapists often to always applying specific interventions when specific problems are present (red) and the % of these therapists feeling (highly) competent in doing so (grey)



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

1. Keus SH et al, Mov Disord 2007; 22: 451-460; www.APPDE.eu

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