



MDS African Parkinson's Disease and Movement Disorders Conference (APMC)

Nairobi, Kenya | March 10-11, 2026



International Parkinson and
Movement Disorder Society
African Section



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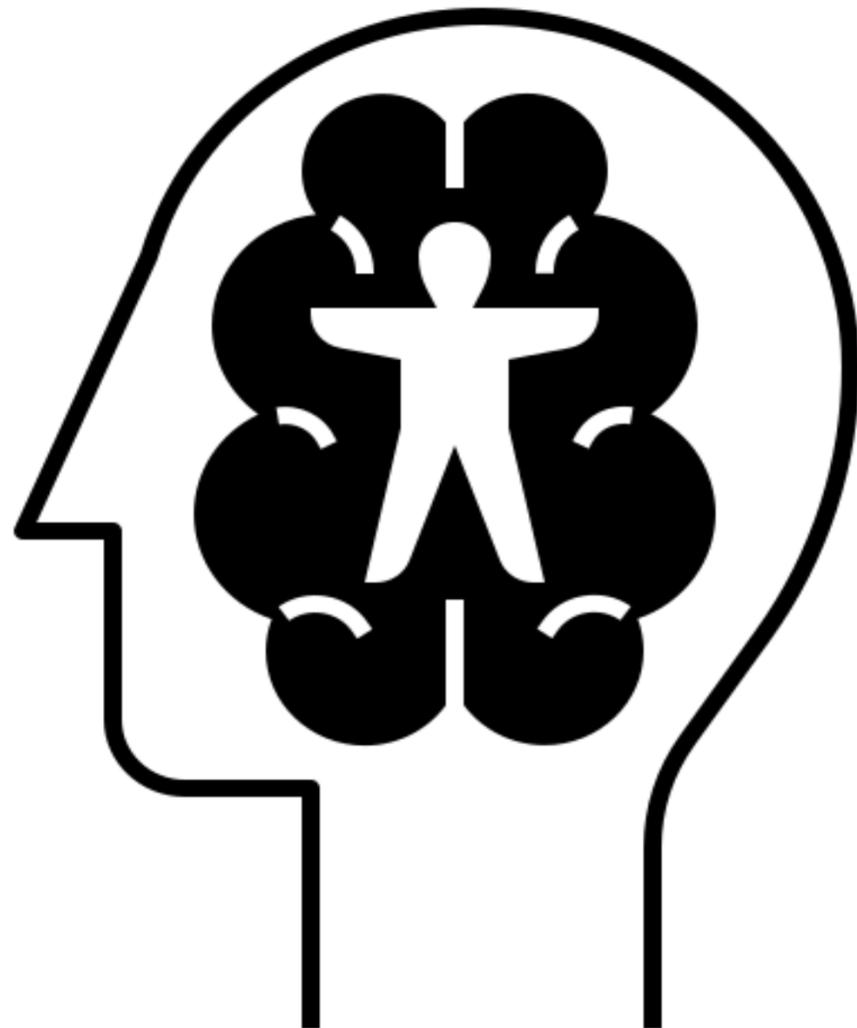
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Topic:

The Role of Rehabilitation in Movement Disorders: Gaps & Opportunities in Africa

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Declaration

- Co-chair of the MDS-AS Education Committee
- Presentation contains some published and unpublished works of the presenter.

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Presentation Outline

- Introduction
- Role of rehabilitation
- Gaps – structures/process, professionals/patients
- Opportunities/priorities
- Conclusion

Learning objectives

At the end of this presentation participants will be able to;

- Describe rehabilitation and its benefits
- Describe the role of rehabilitation professionals
- Identify the gaps that influence rehabilitation use and delivery
- Identify opportunities and priority areas to improve rehabilitation use

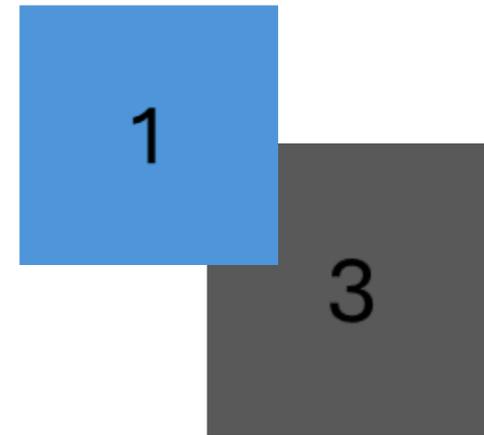


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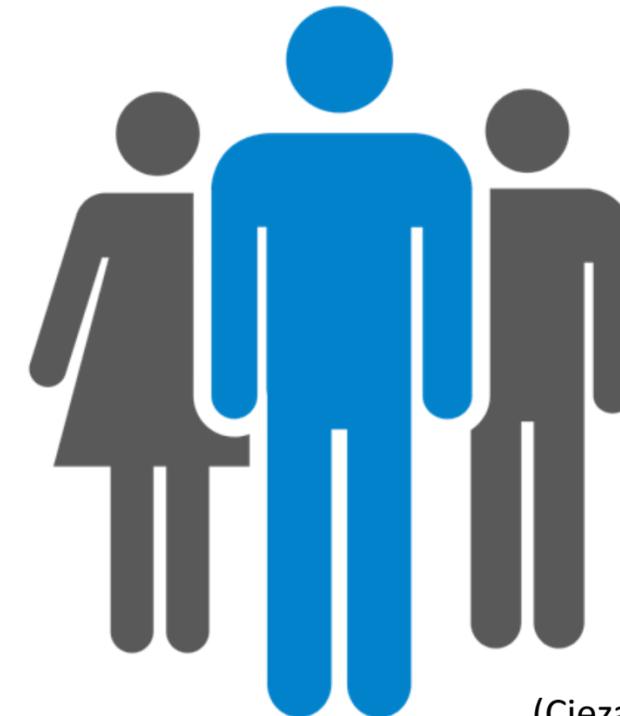
Introduction: What is Rehabilitation?

Rehabilitation is described as a set of interventions aimed at enhancing functional capacity and reducing disability due to disease/injury.

(Krug & Cieza, 2017; Cieza, 2019)



Need rehab. due to disease/injury

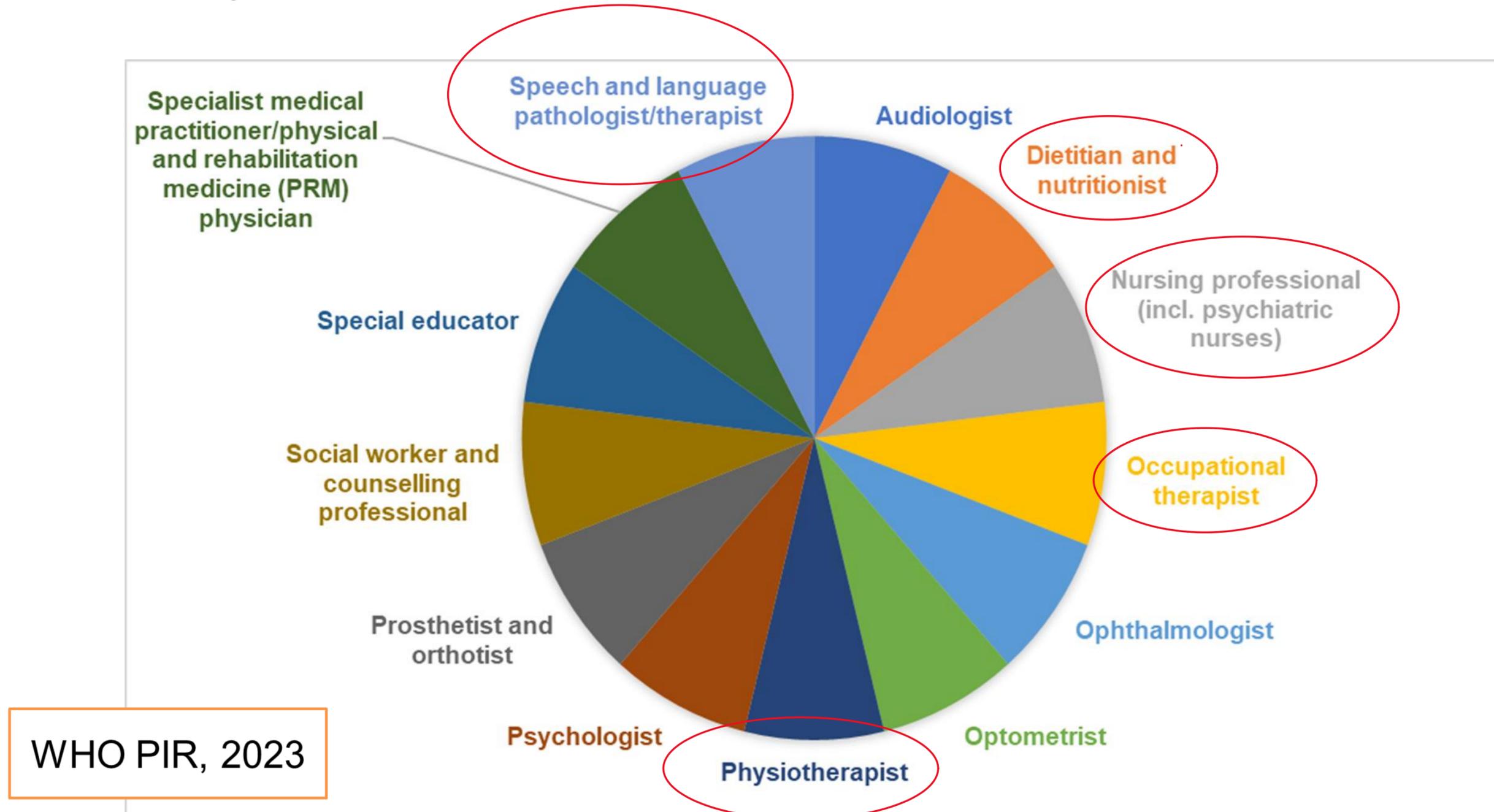


(Cieza et al., 2020).



What Do We Mean by Rehabilitation?

A multidisciplinary,
goal-oriented
approach



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When to start rehabilitation

- Rehabilitation consultation should start in the **early stages** of the disease.

- Rehabilitation provide;
 - **Assessment** (use appropriate outcome measures/rating scales)

- **Education and advice**

- **Information on the benefits of rehabilitation**

- **Evidence-based interventions**

(NICE Guidelines, 2017; WHO, 2023)

What Do Rehabilitation professionals do?

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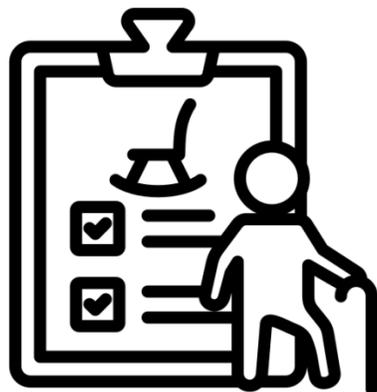
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Evidence for Rehabilitation in Movement Disorders



- **Parkinson's disease:**
 - Exercise improves mobility, balance, motor symptoms
 - SLT improves voice and swallowing
- **Dystonia, ataxia, functional disorders:**
 - Task-specific training and motor retraining
- **Overall, Rehabilitation reduces:**
 - Falls
 - Hospitalisation
 - Caregiver burden

(Radder, Lígia Silva de Lima, et al., 2020; O'Malley et al., 2021; Kwok et al., 2022)

- Evidence is strong globally—but scarce in Africa

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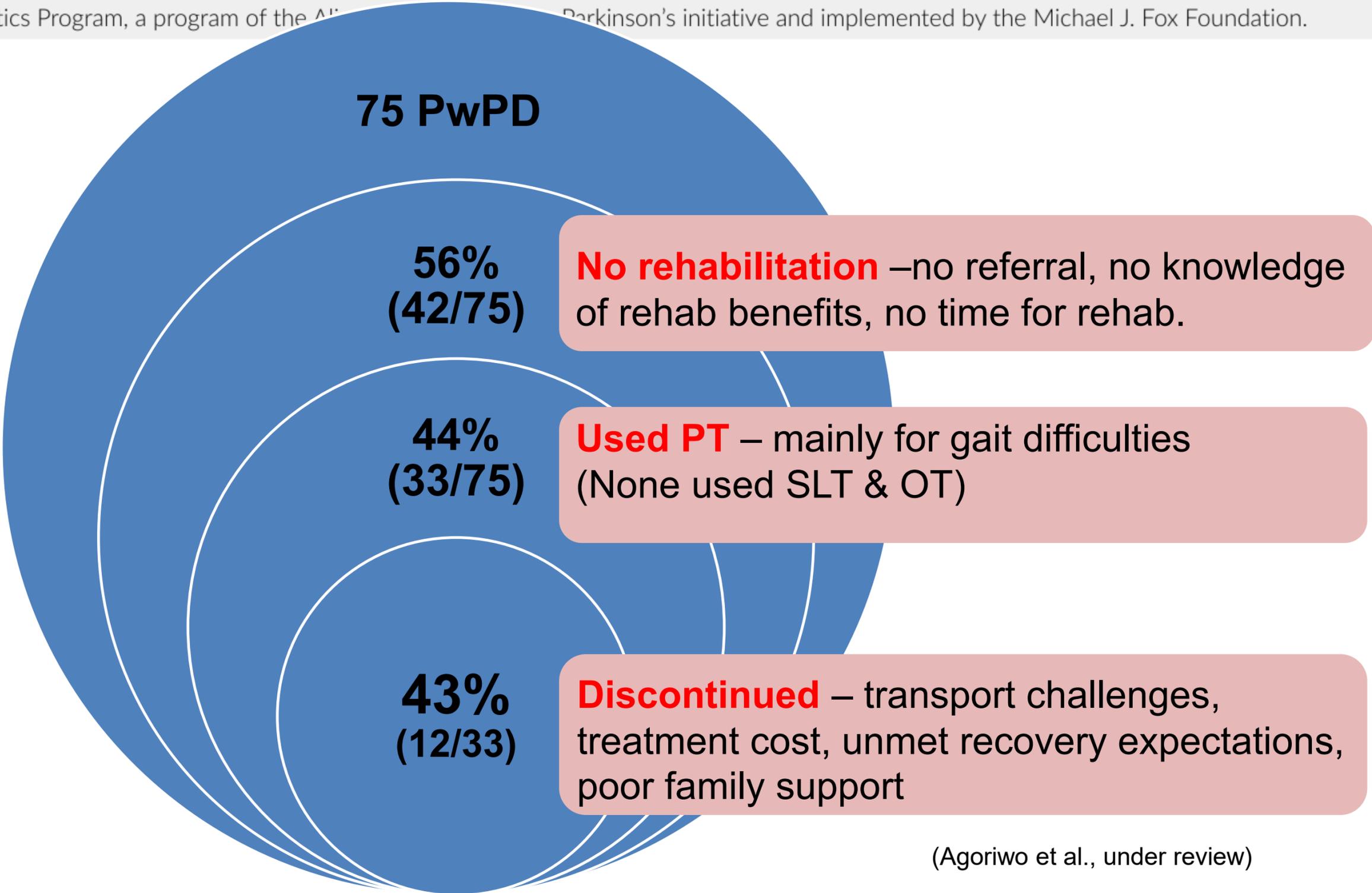
Is Rehabilitation Utilized?

Ghana as a case study

Median;
Duration: 4.5 (0.25-24) months

Sessions: 19(1-204)

6 months max →
discontinued
(1 week – 2 years)



(Agoriwo et al., under review)

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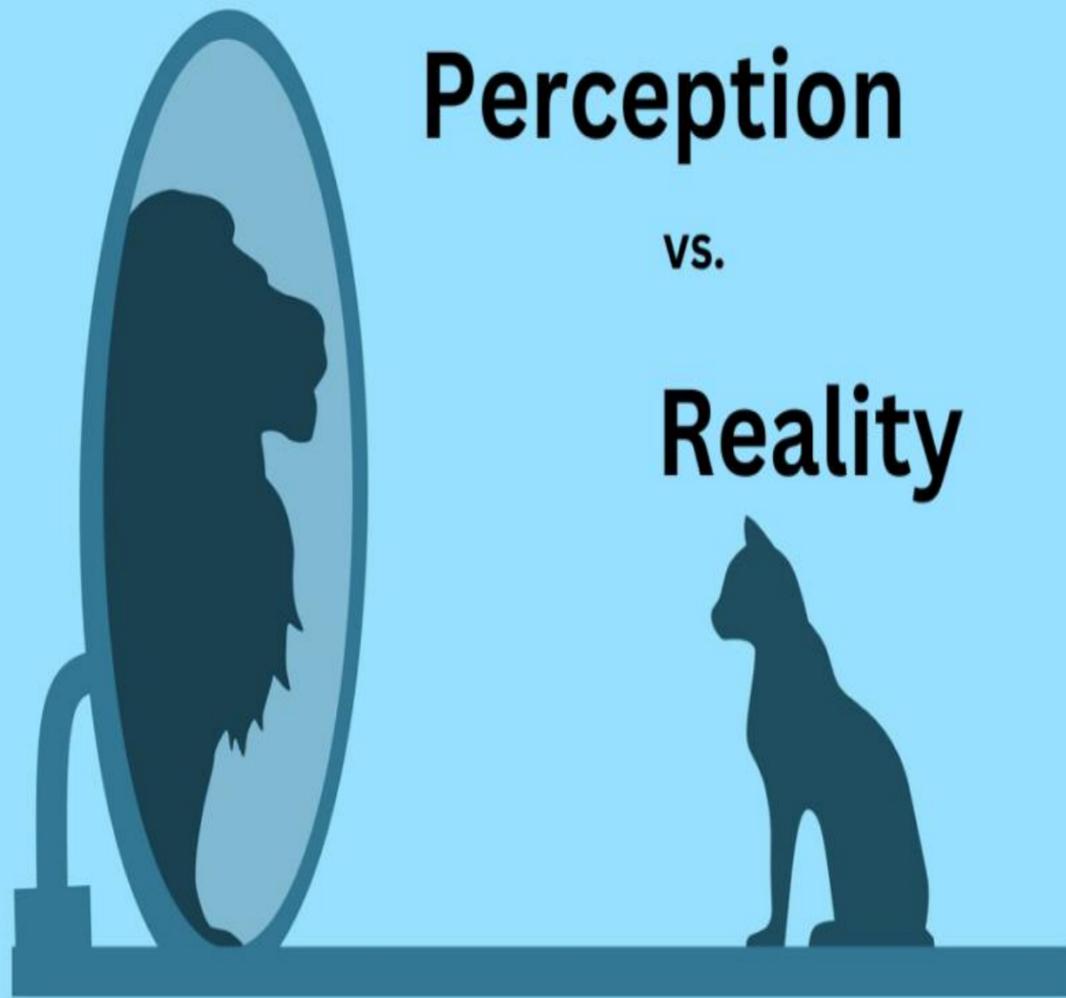
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The African Reality: Current Gaps

Perception

vs.

Reality



Where the system falls short

- Limited access to trained rehabilitation professionals
- **Rehabilitation often:**
 - Tertiary facility and Urban-based
 - Late or absent in the care pathways

- Minimal integration into neurology services
- Weak referral systems and follow-up
- Limited time to screen for indication for rehabilitation

“They (Dr.) only ask about your medication, whether you are taking it. There is nothing about physio and even diet” (57 years Female with PD)

(Agoriwo et al., 2024; 2025)

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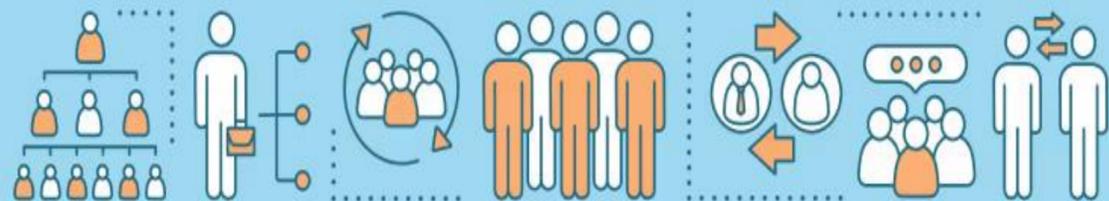


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Workforce & System Constraints



WORKFORCE



Structural barriers

- Shortages of rehabilitation units/professionals (PT, OT, SLT)
- Limited availability of movement-disorder-specific training
- Rehabilitation excluded from most:
 - National neurology guidelines (If any)
 - Health insurance coverage
- Limited multidisciplinary clinics

(Agoriwo et al., 2025; Dotchin, Msuya & Walker, 2007)

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Gaps in Research & Data

What we don't measure, we don't prioritize

- Sparse African data on:
 - Rehabilitation use & outcomes
 - Cost-effectiveness
 - Long-term functional impact
- Few implementation studies
- Limited representation of rehabilitation professionals in research projects



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REVIEW ARTICLE

Journal of Evaluation in Clinical Practice | WILEY

Assessing the factors that influence the utilization and delivery of rehabilitation services among persons with Parkinson's disease: A scoping review

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Abstract
Rationale: Rehabilitation has the potential to significantly improve the lives of people and, most importantly, for persons with Parkinson's disease (PD). Although numerous studies have reported the benefits of rehabilitation for persons with PD (PwPD), these services are still limited and underutilized even when patients exhibit problems that require rehabilitation.
Aims and Objectives: This review aims to describe the (a) indication for referral for rehabilitation services, (b) patterns of referral for rehabilitation and (c) factors that facilitate or hinder the utilization and delivery of rehabilitation services among PwPD.
Methods: A comprehensive literature search was conducted across selected databases, African Journals Online, EBSCOhost (CINAHL, Africa-wide), PubMed, SCOPUS and Web of Science. Studies published in English from January 2002 until December 2022 were applied as limiters. Reference and grey data sources tracking were also conducted. Two reviewers conducted the study selection, screening of titles, abstracts and full text and data charting. A descriptive analysis was performed. Findings were narratively presented and illustrated with tables, diagrams and descriptive formats as appropriate.
Results: Twelve studies were included in the review; however, none were from Africa. Impairments and activity limitations were the key functioning problems indicated for rehabilitation. Age, gender, income, race, disease stage, specific functioning problems, quality of life and care by a neurologist were the main predictors for referral to rehabilitation. Physiotherapy, occupational therapy and speech and language therapy were the most utilized rehabilitation services and were sometimes utilized together. The rate of rehabilitation service utilization among PwPD ranged from 0.9% to 62.5%. Lack of referrals and limited rehabilitation units/professionals were the common barriers to rehabilitation service utilization.

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J Eval Clin Pract. 2024; 1–14. | [wileyonlinelibrary.com/doi/10.1111/jep.13999](https://onlinelibrary.wiley.com/doi/10.1111/jep.13999) | 1

(Agoriwo et al., 2024)

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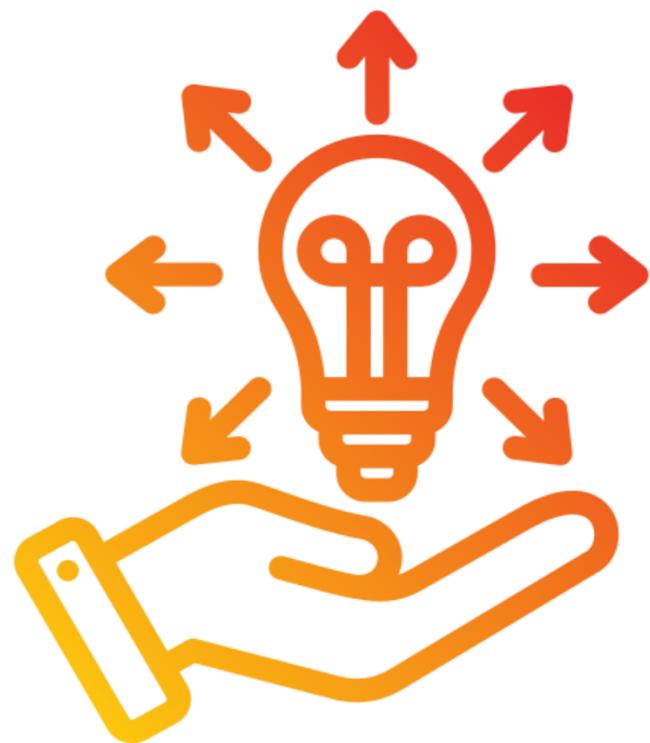


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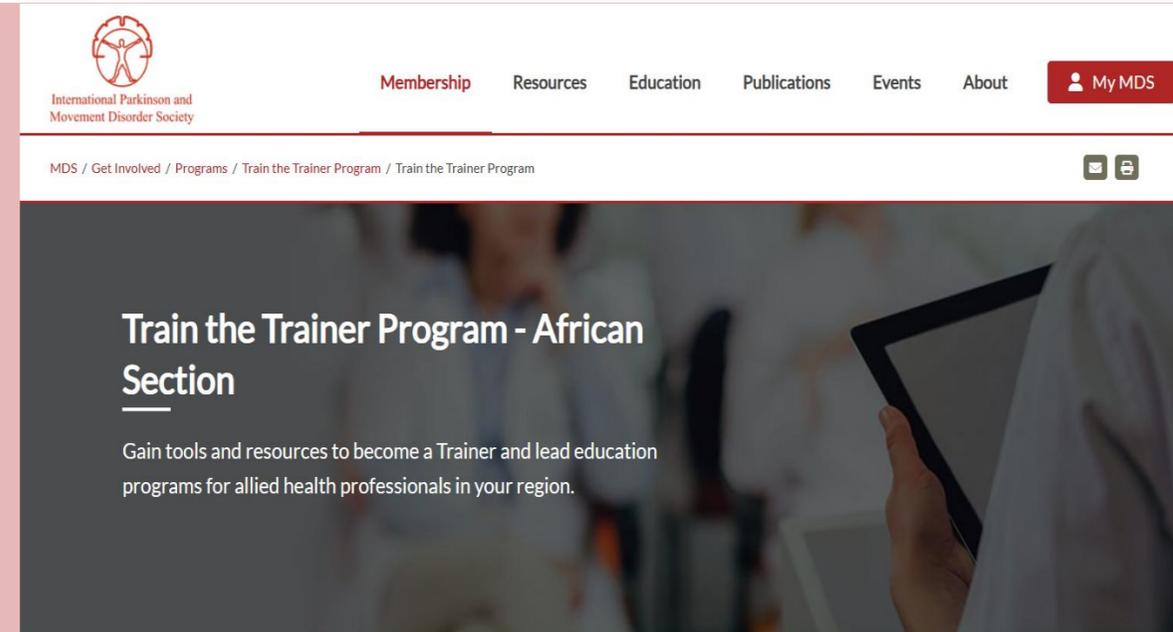
Emerging Opportunities



TraPCAf virtual
training series



- Growing movement disorders expertise across Africa
- **Expansion of:**
 - Multidisciplinary clinics
 - Training partnerships
- Digital health & tele-rehabilitation
- Task-shifting and community-based models
- Integration with non-communicable disease platforms



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Strategic Priorities for Africa

- Embed rehabilitation into movement disorders care pathways.
- Strengthen workforce training and specialization.
- Integrate rehabilitation into national policies and insurance schemes.
- Develop a framework/guideline for setting up multidisciplinary teams and promote culturally responsive care.
- Invest in African-led rehabilitation research (Pragmatic trials of exercise and therapy models; Integration with genetics, epidemiology, and stigma research)



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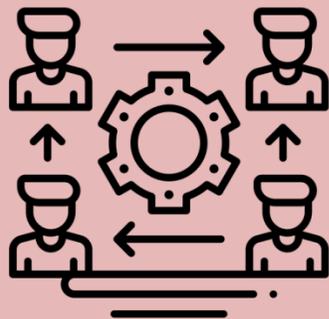
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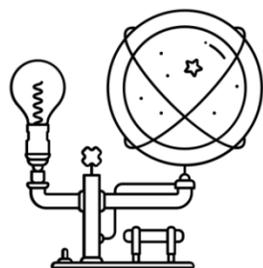
Key Take-Home Messages



Optimal movement disorder care is **incomplete without rehabilitation.**



Multidisciplinary collaboration is the way forward



So, start with one rehab professional at a time

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