

Live Well with PD: Parkinson Pointers

Zoltan Mari, MD

Ruvo Family Chair & Director, Parkinson's & Movement Disorders Program

Clinical Professor of Neurology, University of Nevada

Adjunct Associate Professor of Neurology, Johns Hopkins University



PD Pointers

KEEP MEMORY ALIVE

Supporting the Mission of Cleveland Clinic Lou Ruvo Center for Brain Health



ALZHEIMER'S | HUNTINGTON'S | PARKINSON'S
MULTIPLE SYSTEM ATROPHY | MULTIPLE SCLEROSIS



Introduction

I am pleased to be your speaker today for the PFNCA Parkinson's Pointers Lecture Series.

I have been a member of the PFNCA Medical Advisory Board for many years and am pleased to have an association with this wonderful organization that helps so many fight Parkinson's.

PFNCA is a Maryland-based non-profit organization that is not affiliated with any national organizations that focus on Parkinson's. You can learn more about them at pfnca.org.

Today, there are more than 500 people at 30 different locations in six states viewing this lecture. Thank you for joining us.

The next PFNCA Parkinson's Pointers will take place on September 12th and will feature my colleague on the PFNCA Medical Advisory Board Dr. Fernando Pagan of Georgetown University who will discuss Advances in Treatments for Parkinson's. Please save the date.

For those of you in Maryland, Washington, D.C. and Virginia, please take a moment to note that Walk Off Parkinson's will take place to benefit PFNCA on September 22nd at Nationals Park in Washington, D.C. I hope you can attend this wonderful event.



ZM's Disclosures

- Received grant funding: NIH, MJFF, NPF, Avid, Allergan, Merz, US WorldMeds, AbbVie, Adamas, Great Lakes Neurotechnology
- Received honoraria for consulting/advising: ACADIA, Impax, Ipsen, AbbVie, Merz, Allergan, GLG, US WorldMeds, Revance

Live Well with PD: Leading Problems

- Subjective disability – the role of value system and pre-morbid personality – wide variation among patients
- The disease has many faces – manifests differently in each patient
- The stage of disease and age of the patient are key determinants
- Comorbidities are often critically important – the ambiguity of relatedness (what's PD, what's from comorbidities, overlaps)
- The challenge to navigate the above complexities to identify (1) what are the key problems; and (2) what are the problems that are modifiable



ZM's Practical Pointers

- Getting the diagnosis right – the importance of experience + diagnostic biomarkers – DaTscan (when to use it)
- Multidisciplinary and integrative care in PD
- Clinical mental health counseling



Getting the Diagnosis Right – Clinical Scenarios for Potential Use of DaTscan:

1. Patient with pre-existing ET now with clinical progression at late age: tremor getting coarser
2. Anxious patient, who “wants to know”
3. Patient with use of neuroleptic
4. Patient with psychogenic features



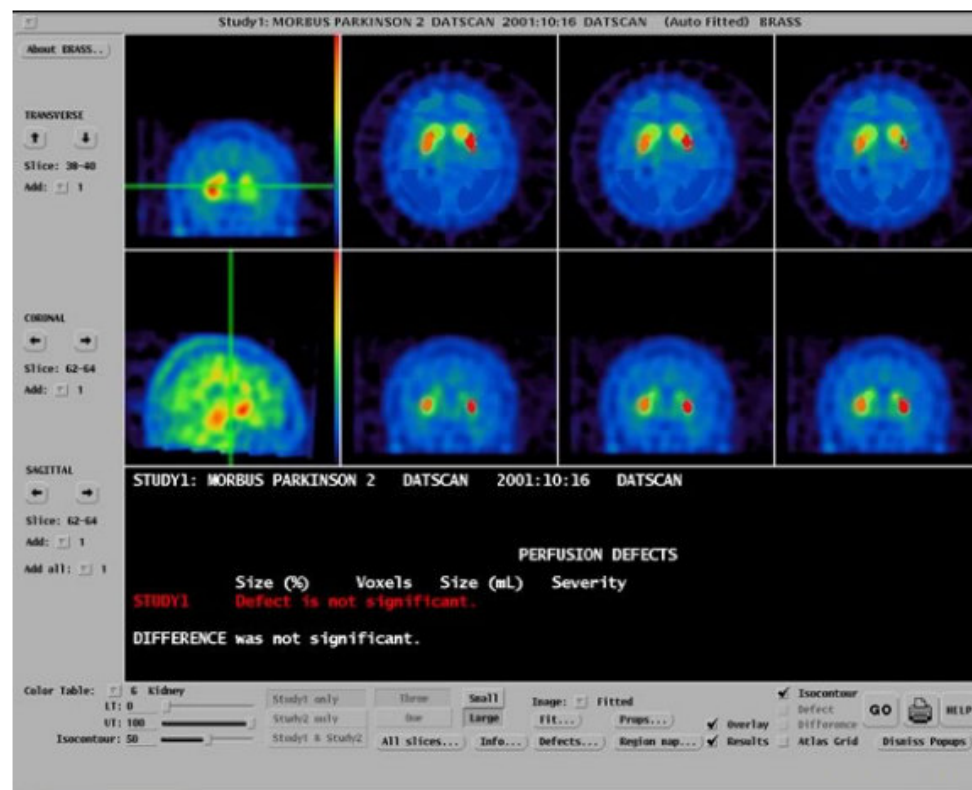
- DaTscan: approved in the US for imaging of the dopamine transporter



DaTSCAN is a solution of ioflupane (^{123}I) for injection into a living test subject.

DaTSCAN Analysis

DaTSCAN™ is a medicinal product for diagnostic use only. DaTSCAN™ is a radiopharmaceutical used in Nuclear Medicine and Radiology Departments for the differential diagnosis of Parkinsonian Syndromes versus Essential tremor. This scan will show the distribution of the radiopharmaceutical within the organ and the body. This gives the doctor valuable information about the function and structure of that organ. DaTSCAN™ binds to the dopamine transporters (DAT), on the neurons in specific areas of the brain. When neuronal degeneration is present, the number of DAT are significantly reduced (for example in patients with Parkinson's disease).

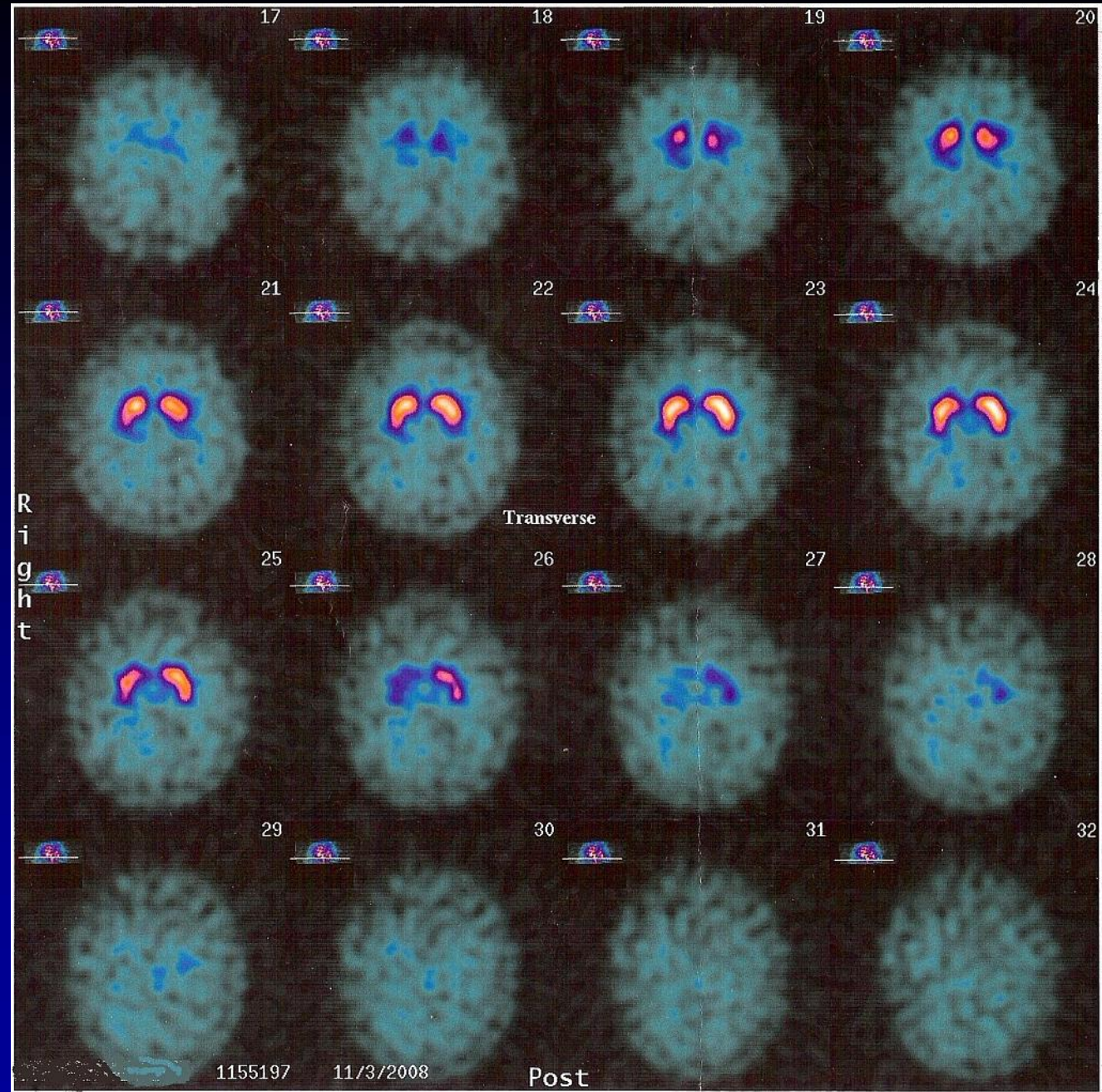


DaTSCAN ANALYSIS

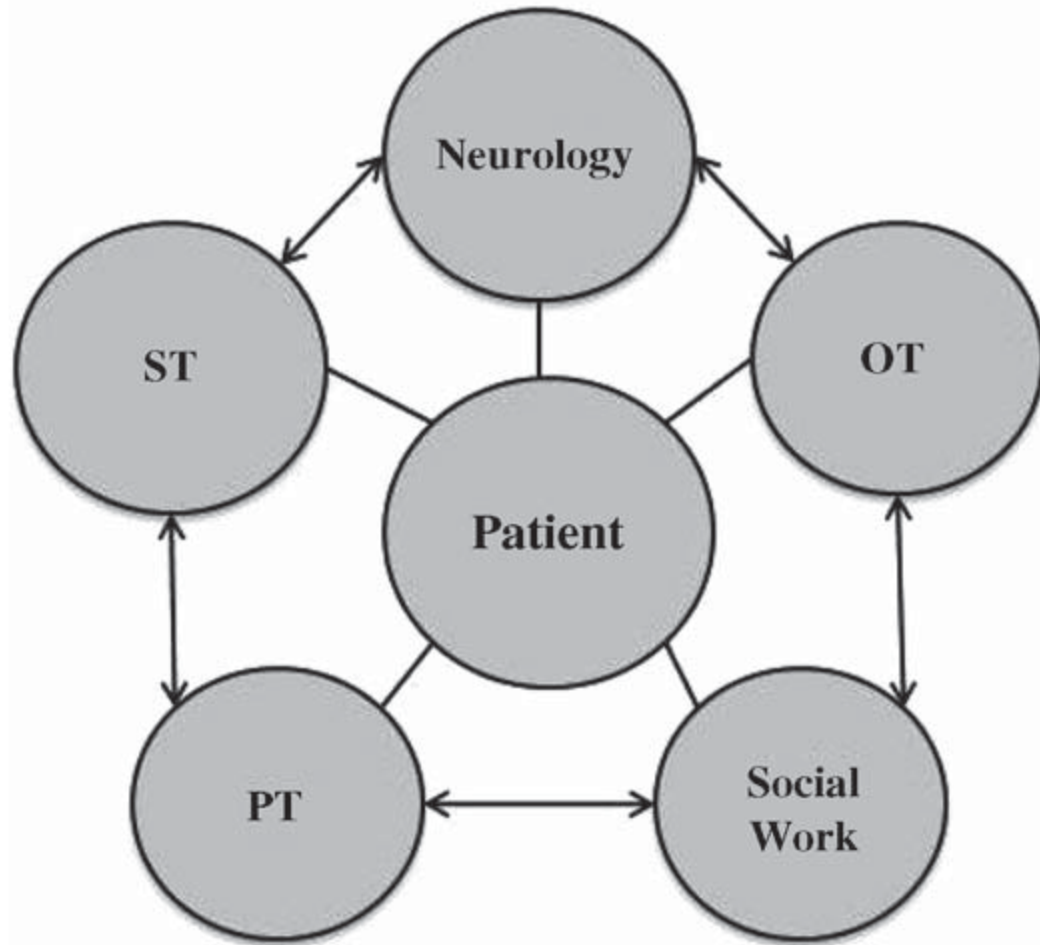
- Automatic Reangulation
- Automatically placed 3-D regions of interest (ROI)
- Automatically placed reference regions
- DaTSCAN is a trademark of GE Healthcare Ltd and DaTSCAN is approved for use in the countries of the European Union

PRODUCT INFORMATION

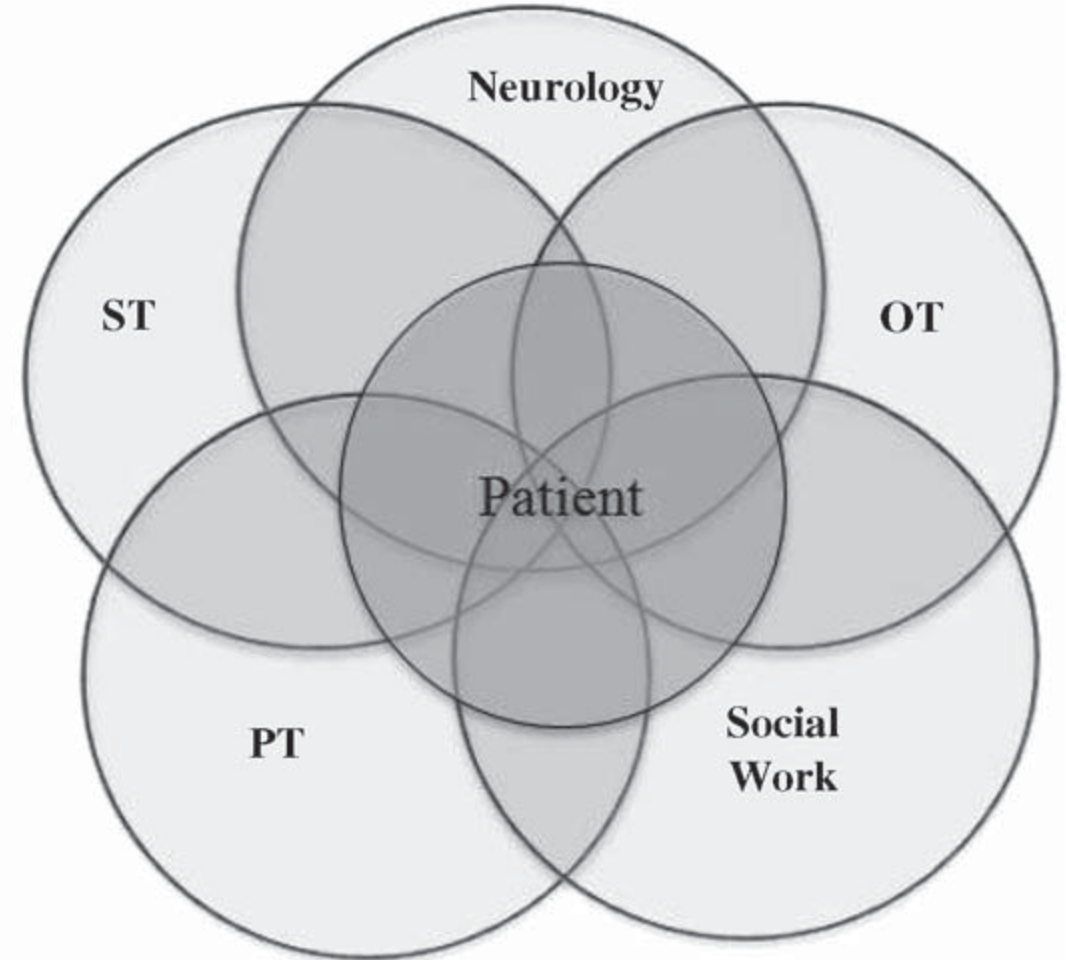
[Request demo >>](#)
[Purchase Product >>](#)



Multidisciplinary Model



Interdisciplinary Model



PD Pointers

The integrative care of Parkinson's disease: a systematic review.

[Lindsay Penny Prizer](#), [Nina Mikelashvili Browner](#)

Published 2012 in Journal of Parkinson's disease

DOI:[10.3233/JPD-2012-12075](https://doi.org/10.3233/JPD-2012-12075)



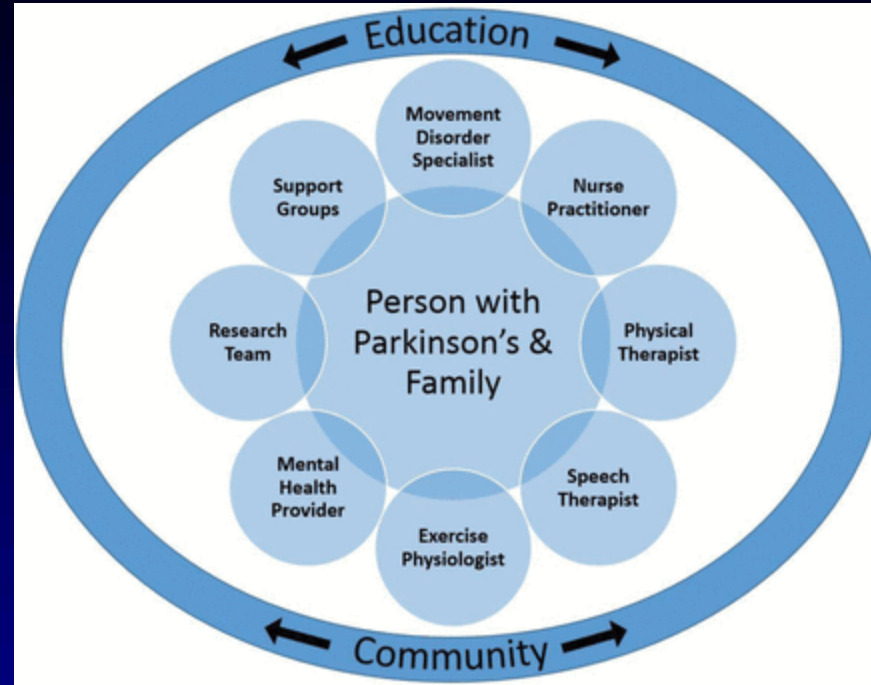
Central Concepts of Integrative Care

1. The continuum of autonomy to (low level) cooperation to integration
2. Vertical integration and horizontal integration
3. Collaborative care
 1. Integration of mental health professionals in primary care medical settings
 2. Close collaboration between social, mental health, and medical/nursing providers
 3. Focus on treating the whole person and whole family
4. Integrated care in the context of population health outcomes, quota based (fee for quality versus fee for service) models, accountable health organizations

Reference:

Butler M, Kane RL, McAlpine D, Kathol RG, Fu SS, Hagedorn H, Wilt TJ. Integration of Mental Health/Substance Abuse and Primary Care No. 173 (Prepared by the Minnesota Evidence-based Practice Center under Contract No. 290-02-0009.) AHRQ Publication No. 09-E003. Rockville, MD. Agency for Healthcare Research and Quality. October 2008.





Implementation of an Integrative Holistic Healthcare Model for People Living with Parkinson's Disease

Ingrid Pretzer-Aboff, PhD Allen Prettyman, PhD

The Gerontologist, Volume 55, Issue Suppl_1, 1 June 2015, Pages S146–S153, <https://doi.org/10.1093/geront/gnv004>

Published: 16 May 2015

PD Pointers



Table 1
Intervention studies evaluating the effectiveness of multidisciplinary care for individuals with Parkinson's disease

Author	Methodology	Study Design		Follow-Up Duration	Results
		Intervention	Team Effectiveness Variables		
Guo et al. (2009)	Single-blind, randomized trial, with a pre-test/post-test quasi-experimental design, measuring the short term effects of multidisciplinary team treatment for 44 non-demented Parkinson's patients	The intervention group received three group lectures on Parkinson's health education, covering the topics: nutrition, movement, and mood. Relevant information was posted to a website. Participants then received individualized physical and occupational therapy comprised of 24 half-hour sessions over eight weeks	-Hoehn and Yahr stages -HR-QOL -UPDRS -Schwab and England Activities of Daily Living (SEADL) -Zung Self-Rating Depression Scale (SDS) -Global patient's mood status (PMS) -Caregiver's mood status (CMS)	Assessments at time zero, after four weeks of intervention, and the end of the eight-week intervention	On the HR-QOL, the intervention group showed a 37% improvement on PDQ-39 scores. On the UPDRS, the intervention group improved in ADLs and movement. Intervention participant scores showed significant improvement on the global patient's mood status measure.
Trend et al. (2002)	Exploratory, one group, pretest/posttest design 118 patients participated in 24 groups of six with their carers. Studied the short term effects of team treatment	Six, 5.5 hour session multidisciplinary (nurse, physical therapist, occupational therapist, and a speech therapist) treatment program involving both individual and group treatment for patients as well as their carers	-Hoehn and Yahr stages -Barthel ADL Index -Hospital Anxiety and Depression Scale (HADS) -Euroqol-5d -Emerson and Enderby measures of voice and articulation -Timed walk	Assessments at time zero and at the sixth week	Participants showed significant improvements in health-related quality of life, depression, mobility and gait, voice articulation and speech

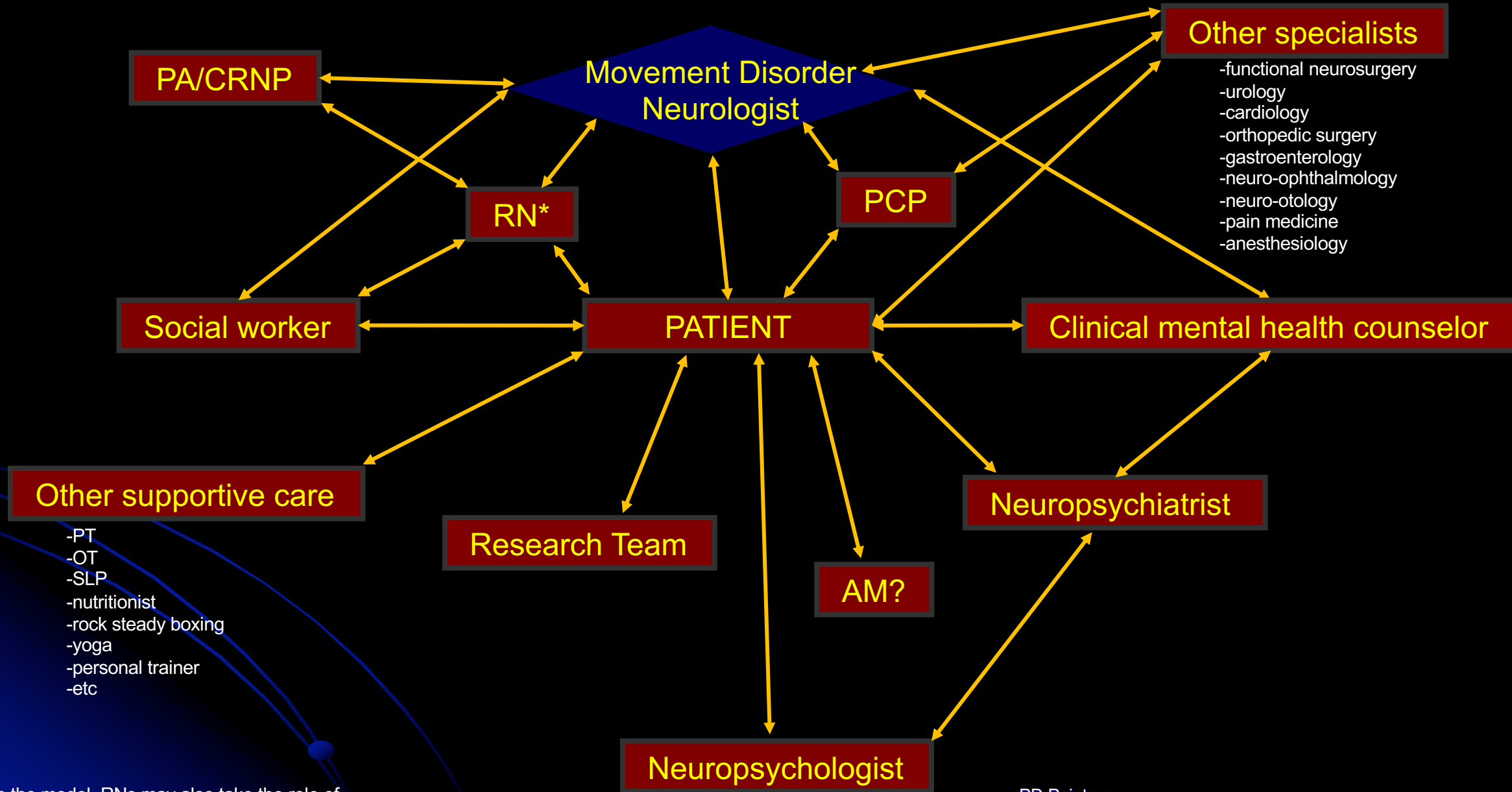
Table 1 Intervention studies evaluating the effectiveness of multidisciplinary care for individuals with Parkinson's disease

The integrative care of Parkinson's disease: a systematic review.

Lindsay Penny Prizer, Nina Mikelashvili Browner
Published 2012 in Journal of Parkinson's disease
DOI:[10.3233/JPD-2012-12075](https://doi.org/10.3233/JPD-2012-12075)



Multi-Disciplinary Care in PD



*depending on the model, RNs may also take the role of patient educator, research coordinator, and are key toward the PDNS model

Therapy in PD

- **Clinical mental health counseling (therapy) should generally not be offered outside of an expert, multidisciplinary care model – therapy is one of the important elements of such care model – it is usually requested or recommended by a physician (preferably either a movement disorder knowledgeable neurologist or neuropsychiatrist).**



Therapy Process in PD contd.

- A patient is also welcome to initiate the process, however, the mental health therapist should consult the outcome and medical ramifications with a physician that is primarily responsible for the patient's care.
 - The only exception is when the counseling addresses other personal concerns



Non-motor symptoms/issues where mental health therapy may be clinically indicated

- **Anxiety**
- **Depression**
- **Executive dysfunction**
- **Psychosis**
- **Psychosocial stress**
- **Impulse control issues**
- **Caregiver burden**



PD-Anxiety

- **Common among PD patients. It occurs in about 50% of patients**
- **May present as generalized anxiety (cognitively and physically, such as increased freezing)**
 - **Episodes of anxiety may trigger and aggravate existing pre-existing tremors**
- **Panic attack; severe sense of foreboding that may be triggered by a number of contextual factors.**
- **Social avoidance associated with fear of showing PD symptoms; relating to friends in social situations.**



Mental health therapeutic intervention for anxiety

- Cognitive behavior therapy
 - Targets automatic reactions, first with behavior interventions that activate calm, and then uses cognitive methods to address underlying assumptions that trigger and maintain anxiety.
- Short-term and focused on skill building for managing anxiety symptoms
- Use of exposure techniques to address fear structures
- Relaxation techniques; combined with cognitive concepts such as defusion and *self as a context*



Mental health therapeutic interventions for depression

- **Cognitive Behavior Therapy (CBT)**
 - Targets negative thoughts
 - Apathy
- **Acceptance and commitment therapy (ACT)**
 - Emphasizes a new way of *being* and relating to one's situation
- **Mindfulness based practices**
 - Incorporated meditation and relaxation exercises



Mental health therapy for executive dysfunction

- Techniques are used to help improve functions such as remembering, completing tasks, and multitasking.
- These techniques can include:
 - Planning
 - Modifying plans and going with the flow when appropriate
 - Embrace this digital age; there's no escaping it, anyway.
Devices for reminders, organizations, etc.
 - Cognitive-behavioral therapy (CBT)
 - MCBT



Mental health therapy for Psychosis

- **Psychosis (hallucinations, paranoia, delusions) – please note that for signs of major psychosis clinical mental health counseling alone is not sufficient – neuropsychiatric care is also required**
- **In PD, delusions may present as persecutory delusional beliefs (patients may incorrectly believe they are being poisoned, recorded, or that their spouse is cheating on them).**
- **CBT tailors intervention that includes appropriate psychoeducation on PD-specific psychoeducation, ways to respond so as not to maintain the beliefs or escalate them.**
 - **Targeted countering of belief systems that main the hierarchy of delusions**



Mental Health Therapy for Psychosocial Stress

- Psychosocial stress are issues that manifest in social context, as a result of ongoing personal challenges (health, financial needs)
- Motor and non-motor symptoms in PD affect social functioning, and dealing with ongoing symptoms can be debilitating, and ultimately impede functioning.
- Without appropriate intervention, it may lead to adoption of poor coping skills or lack of self care
- Mental health therapist can help to build psychosocial needs into goals of therapy, and work with patient and family on proper stress management to improve QoL



Caregiver burden

- Caregivers are often spouses or other family members
- The demands of caregiving can induce psychosocial stress, and which in turn can affect this crucial component of treatment process in patients
- Transition to care partner role may present some difficulties for the caring spouse, and ultimately increase the perceived burden of care.
- Family centered and couple's therapy can help to address these issues, within the context of PD treatment.



Practical Guides and Tips for Patients and Caregivers

- If you identify distress, related to your PD and mentation, behavior, and mood, please share with your doctor and discuss the possible role of clinical mental health counseling.**
- If felt appropriate by your physician, a referral may be made to a clinical mental health counselor with PD expertise**
- You may also contact a counselor directly and ask to share notes, impressions with your treating physician as appropriate**
- Depending on your insurance plan, part or most of the charges may be reimbursable or charged to your insurance**





Acknowledgments!

Lynda Mari, CPC

Person Holistic Innovation and soon “Nevada Tele-Therapy”

LYNDA@PERSONHOLISTICINNOVATIONS.COM |(702) 997-4607



References

- Dobkin, R. D., Menza, M., & Bienfait, K. L. (2008). CBT for the treatment of depression in Parkinson's disease: a promising nonpharmacological approach. *Expert review of neurotherapeutics*, 8(1), 27-35.
- <http://www.patientcareonline.com/depression/psychiatric-symptoms-associated-parkinson-disease>
- <https://www.parkinson.org/sites/default/files/anxiety%20and%20parkinson's.pdf>
- Kaczurkin, A. N., & Foa, E. B. (2015). Cognitive-behavioral therapy for anxiety disorders: an update on the empirical evidence. *Dialogues in clinical neuroscience*, 17(3), 337-46.
- <https://www.goodtherapy.org/learn-about-therapy/issues/psychosis>

