## **Psychiatric Issues in Parkinson's Disease**

#### Parkinson's Disease 2023 Patient and Caregiver Symposium

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## **Objectives**

Discuss importance of mental health in Parkinson's Disease Explain how to recognize depression, anxiety, and apathy Discuss potential treatment options and other tips for improving mental health

# MENTAL HEALTH

15...

- · Important
- · Something everyone has
- Intrinsically Linked to (+ probably inseparable from) physical heath
- · On a continuum
- · Worth making time for
- · Part of being human
- Something we need to look after
- · Positive + Negative
- · Changeable · Complex
- · Real

ISN'T ...

- A sign of weakness
- Shameful
- · All in your mind
- · Always something negative
- · Something you decide to have
- · Something to think about only when it feels broken
- An interchangeable term with mental illness
  - Feeling good all the time • Something you can snap out of • Fixed
    - · Fake news



#### Depression

#### Apathy

Anxiety

### Why is mental health important?

Mental health greatly affects quality of life

- It affects how we think, feel, and act
- It can exacerbate other Parkinsonian symptoms
- Depression and anxiety can affect overall health and quality of life <u>at least as much</u> the motor symptoms of PD

Depression can be deadly – increases risk of suicide

Mental health disorders are very common in PD

#### Why is mental health important?

Depression: 30% PD vs. 15% normal

Apathy: 40% PD vs. 2% normal

Anxiety: 40% PD vs. 33% normal

# Despite being common, they are underrecognized and undertreated

Aarsland D, et al. Depression in Parkinson disease--epidemiology, mechanisms and management. Nat Rev Neurol. 2011 Dec 26;8(1):35-47. den Brok MG, et al. Apathy in Parkinson's disease: A systematic review and meta-analysis. Mov Disord. 2015 May;30(6):759-69.

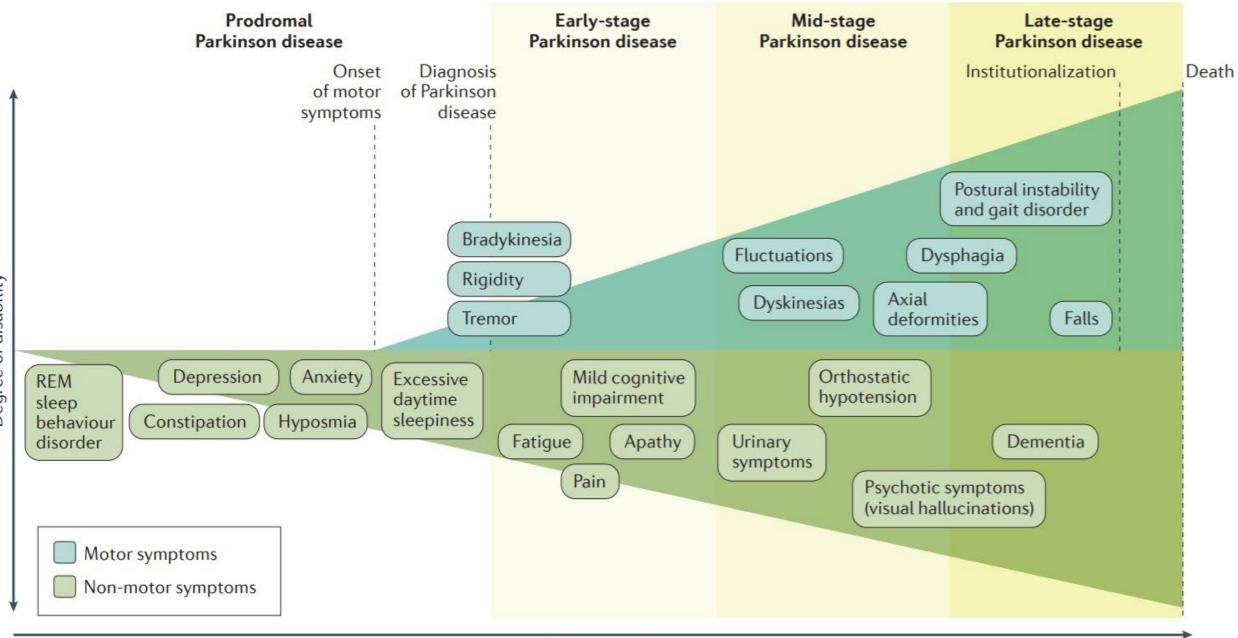
# Why are mental health issues so common in PD?

#### Reactionary

- Limited activities
- Reduced independence
- Chronically progressive disease without a cure

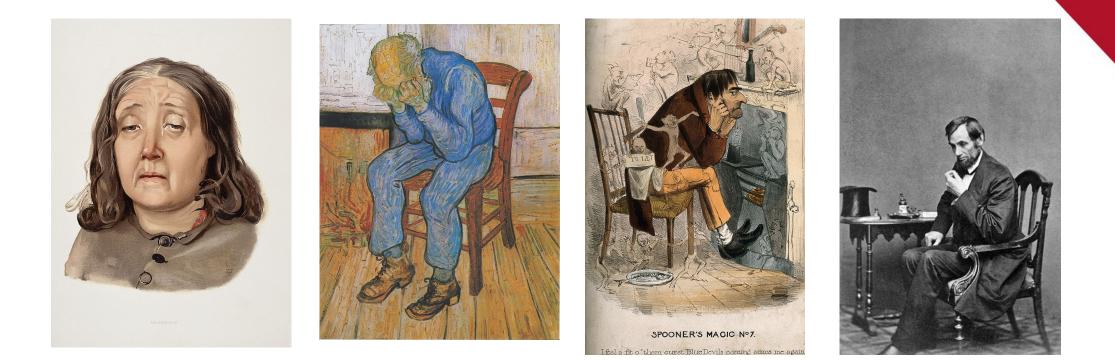
## Intrinsic to Parkinson's Disease

- Loss of brain cells producing dopamine, serotonin, and norepinephrine
- These chemicals are responsible for regulating mood, energy, motivation, appetite, and sleep



Time (years)

Degree of disability



## What is Depression?

### What is Depression?

Major Depressive Disorder (MDD)

DSM-V criteria (Diagnostic and Statistical Manual of Mental Disorders):

- <u>2 weeks</u> of <u>at least 5</u> of the following:
  - Depressed mood\*\*
  - Loss of interest in activities/pleasure (anhedonia)\*\*
  - Fatigue/low energy
  - Changes in weight (gain or loss)
  - Sleep changes (insomnia or excessive sleep)
  - Motor slowness or agitation
  - Feelings of worthlessness/guilt
  - Decreased concentration
  - Thoughts of death/suicide
- Symptoms must cause significant distress or impairment

## **Risk Factors for Depression**

Female gender

- Young onset of motor symptoms (<40 years old)
- Severe cognitive impairment
- Other medical problems (e.g., heart disease, arthritis, diabetes)
- Family history of depression

# Difficulties in diagnosing depression in PD

- Many symptoms of depression overlap with symptoms of PD
- Reduced facial expression in PD makes it more difficult to express emotion
- Depression in PD often involves frequent, shorter changes in mood versus a constant state of sadness daily
- Many people with Parkinson's do not recognize they have a mood problem or are unable to explain symptoms



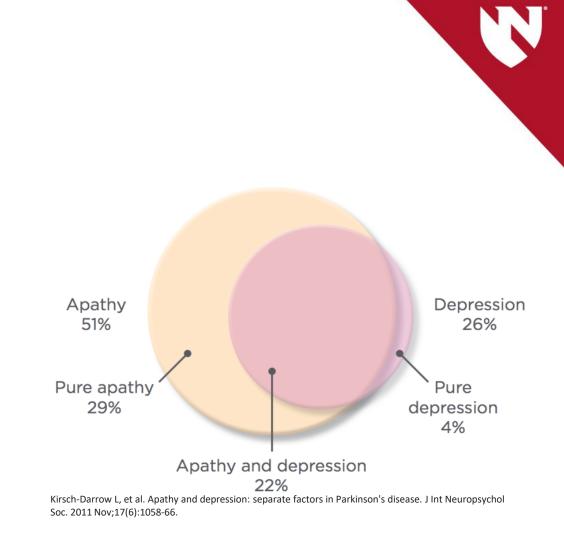
# Apathy

## What is Apathy?

A lack of motivation, failure to initiate goal-directed behavior

- Examples of apathetic behavior
  - Difficulty initiating activities
  - Needing prompting or reminding
  - Low activity levels
  - Lack of effort/reduced productivity
  - Not completing tasks that were started
  - Not concerned about issues that used to be important

Often seen with depression, but commonly can present as pure apathy



## **Depression vs. Apathy**

#### Depression – Mood disorder

Sadness Worthlessness Guilt Hopelessness Helplessness Pessimism Suicidal ideation

#### Apathy – Motivation disorder

Decreased initiative

Less interest in starting new activities

Less interest in the world

**Emotional indifference** 

Decreased emotional reactivity

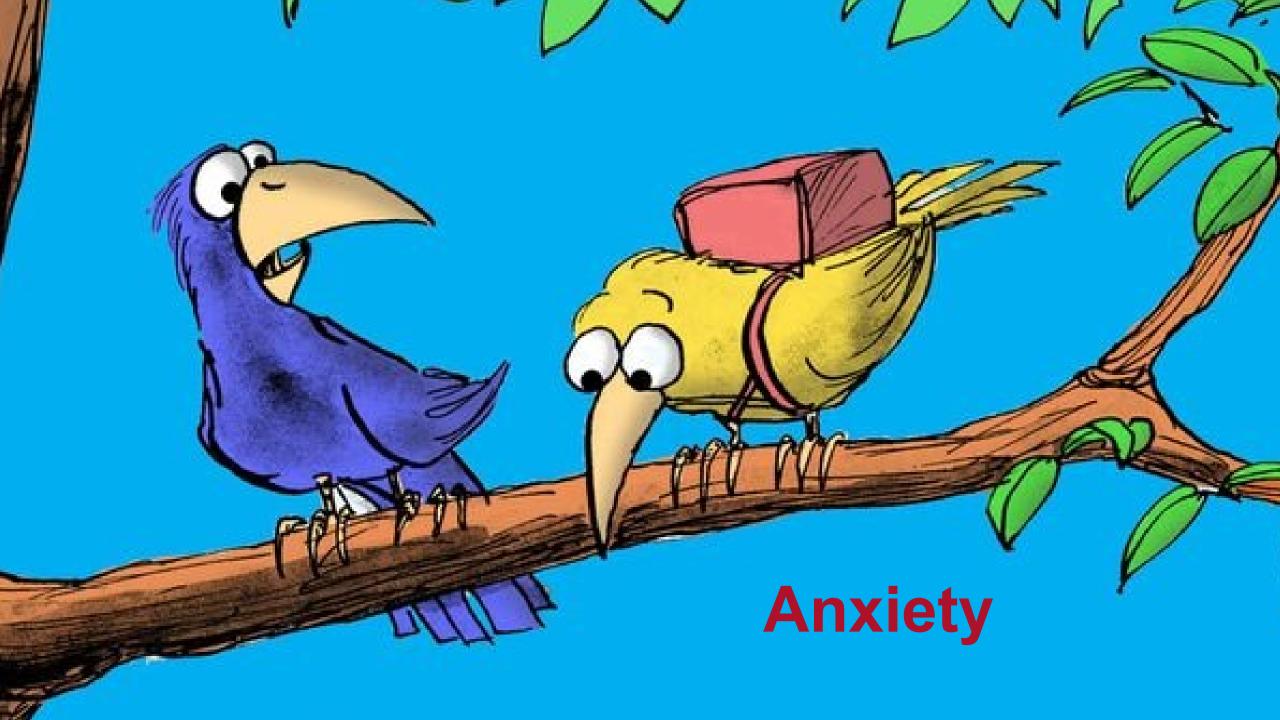
#### Overlap

Anhedonia (inability to feel pleasure) Less interest in usual activities Increased slowness

## Why is Apathy Harmful?

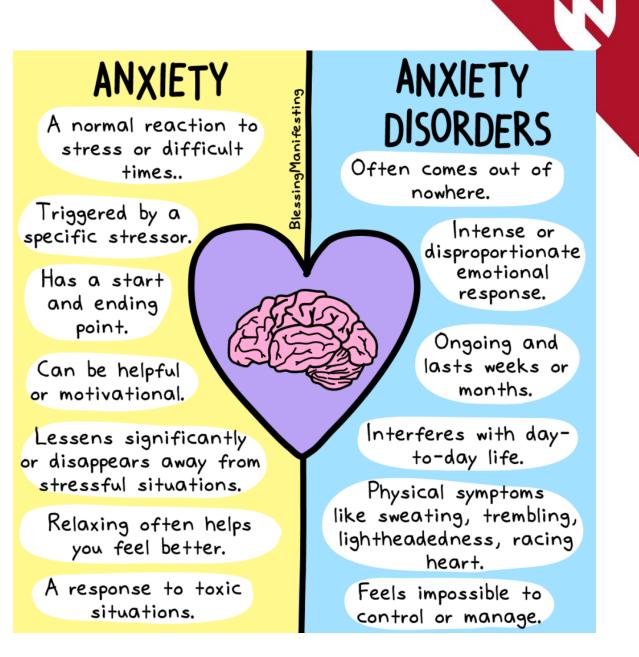
Reduced daily functioning and activity Increased caregiver stress/distress Poor treatment compliance Worse rehabilitation outcome

## **Higher Morbidity and Mortality**



# What is an Anxiety Disorder?

Feelings of constant worry or nervousness that are present more than what would be considered normal and result in a significant impact on daily functioning and quality of life



http://invermeresummityouthcentre.org/anxiety/

## What is an Anxiety Disorder?

Common manifestations:

- Excessive worry
- Avoidance
- Seeking reassurance
- Easily upset
- Insomnia
- Eating disorders
- Physical complaints
- Panic attacks

## What is an Anxiety Disorder?

The 3 most common types of anxiety in PD are

- Generalized anxiety disorder
- Social anxiety
- Anxiety/panic attacks

# How does anxiety cause problems?

Exacerbates motor symptoms of PD Impaired concentration and memory Interferes with sleep Medication side effects Friction with friends and family

#### Suicide

Approximately 30% of PD patients have had thoughts about suicide Danish study found that people diagnosed with PD were 2.2x more likely to commit suicide than the general population

When you or a loved one has suicidal thoughts:

- Use your social support network find a support group, stay socially engaged
- Seek professional help: psychiatrist, psychologist, neurologist, social worker
- Prioritize self-care
- Use emergency support services. <u>Call 911 there is immediate need</u>

Erlangsen A, et al. Association Between Neurological Disorders and Death by Suicide in Denmark. *JAMA*. 2020;323(5):444–454. Lee T, et al. Increased suicide risk and clinical correlates of suicide among patients with Parkinson's disease. *Parkinsonism Relat Disord*. 2016 Nov;32:102-107.

#### **Suicide Resources**

#### National Suicide Prevention Lifeline 1-800-273-8255

The Lifeline provides 24-hour-a-day, free and confidential support for people in distress, prevention and crisis resources for you or your loved ones and best practices for professionals https://suicidepreventionlifeline.org/

#### The Substance Abuse and Mental Health Services Administration National Helpline 800-662-HELP (4357)

Confidential, free, 24-hour-a-day, 365-day-a-year, information service, in English and Spanish, for individuals and family members facing mental and/or substance use disorders https://www.samhsa.gov/

#### **Crisis Text Line Text HOME to 741741**

Crisis Text Line provides free, 24/7 mental health support via text message https://www.crisistextline.org/

## How can we treat mental health?

#### Medications Psychotherapy

#### Exercise

#### **Social Support**

## **Medications for Depression**

Very few controlled trials of medications for depression in PD First line therapies:

SSRIs: citalopram (Celexa), paroxetine (Paxil), sertraline (Zoloft), others

#### Second line therapies

- SNRIs: venlafaxine (Effexor), duloxetine (Cymbalta)
- TCAs: amitriptyline (Elavil), nortriptyline (Pamelor)
- MAOIs/COMTs: selegiline (Eldepryl), rasagiline (Azilect), entacapone
- \*\*Antipsychotics: quetiapine (Seroquel), clozapine (Clozaril)
- Others: mirtazapine (Remeron), trazodone (Desyrel), bupropion (Wellbutrin)

## **Medications for Anxiety**



No controlled trials specifically for anxiety in PD

#### First line therapies

SSRIs & SNRIs

#### Second line therapies

- TCAs
- Others: buspirone (Buspar), gabapentin (Neurontin), pregabalin (Lyrica)
- Antipsychotics: quetiapine (Seroquel), clozapine (Clozaril)
- Benzodiazepines: clonazepam (Klonopin), lorazepam (Ativan), diazepam (Valium)

## **Medications for Apathy**

Currently no approved treatments specifically for apathy First line

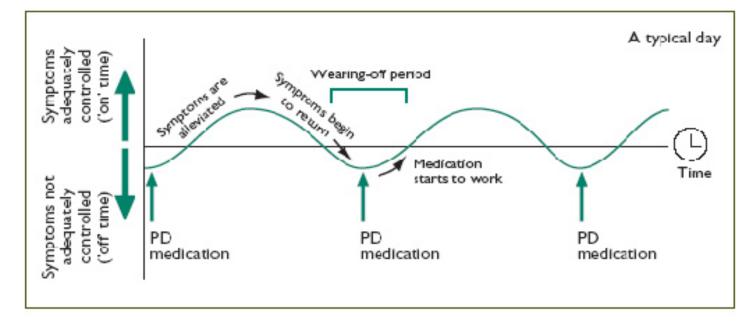
- Optimizing Parkinson's medication regimen
  - Carbidopa/levodopa
  - Ropinirole (Requip), pramipexole (Mirapex), rotigotine (Neupro)

Second line

- Cholinesterase inhibitors: donepezil (Aricept), rivastigmine (Exelon)
- SNRIs
- Stimulants: Methylphenidate

### **Special Considerations for PD**

As PD progresses, fluctuations in symptoms can occur with changing levels of medication in your body Not only motor symptoms! Mental health can fluctuate, as well Adjustment of PD medications may be required for optimal treatment



## **Other Medical Interventions**

#### Deep brain stimulation (DBS) Electroconvulsive therapy (ECT)

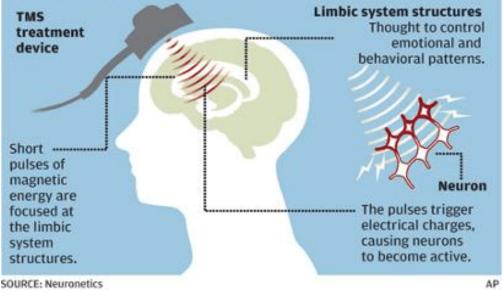
- Longstanding therapy for severe, intractable depression. No trials specifically for PD
- Safe and effective may cause temporary confusion/delirium
- Incompatible with DBS

# Transcranial magnetic stimulation (TMS)

- Recently FDA-approved for depression
- Under investigation for effects on mood and motor symptoms in PD

#### Magnetic pulse to ease depression

A non-invasive procedure to help fight depression called transcranial magnetic stimulation, or TMS, uses a magnetic pulse to stimulate brain cells that control mood.



## **Psychotherapy**

Cognitive behavioral therapy (CBT)

- A therapy technique aimed at changing negative thinking and behavior patterns. Helps establishing coping techniques and thinking positively
- The most studied intervention for depression and anxiety in PD. Shown to be at least as effective than use of medication alone

Resource to find a local therapist: psychologytoday.com



Dobkin RD, et al. Cognitive-behavioral therapy for depression in Parkinson's disease: a randomized, con-trolled trial. Am J Psychiatry. 2011;168(10):1066-1074



Exercise improves physical and psychiatric symptoms of Parkinson's Disease

Examples:

- Walking
- Stretching
- Yoga
- Tai-Chi
- Lifting weights
- Whatever gets you moving!





#### **Complementary and** Non-Conventional Therapies

Light therapy Relaxation techniques Massage therapy Acupuncture Aromatherapy Meditation Music therapy

## **Social Support**

Your network of people that you can turn to in times of need (and vice-versa) Family, friends, work, support group, religious community, etc. Helps build healthy habits, cope with stress, and improve motivation

#### Types of social support

- Emotional support
- Instrumental support physical support (e.g., hot meal, rides)
- Informational support guidance, advice, mentoring



## **Support Groups**

Helpful for both PD patients and caregivers! Information on local support groups can be found at:

• www.ParkinsonsNebraska.org



www.Parkinson.org





•



THE MICHAEL J. FOX FOUNDATION FOR PARKINSON'S RESEARCH

Also, many on-line support groups



#### **Take-Home Points**

- Depression, anxiety, and apathy are very common in PD
- Not a personal failing/weakness, it is a part of PD and a chemical imbalance in the brain
- Affects quality of life as much as motor symptoms
- Depression increases risk of suicide
- Underdiagnosed: recognition of the symptoms is key!
- Can be difficult to recognize, they mimic motor symptoms of PD and may present in different patterns than non-PD patients
- Discuss your mental health with your doctor annually. If possible, bring along a family member or friend