



# Assessment and management of psychological issues in Parkinson's disease

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# Parliamentary report on Parkinson's and mental health

People often report depression or anxiety as most disabling aspect of their Parkinson's, yet don't receive the same level of care for mental health as they do for their physical symptoms.

Mental health problems associated with lower quality of life, work and social function, and faster cognitive decline, carer dependency and mortality.

A false divide between physical and mental health services has led to people with Parkinson's experiencing disconnected care.

Report recommends **person-centred integrated care.** 



### Mental health matters too

Improving mental health services for people with Parkinson's who experience anxiety and depression

May 2018



# Are there psychological issues in Parkinson's?

Rest tremor

Rigidity

Slowness of movement

Postural instability



Anxiety (60%)

Depression (35%)

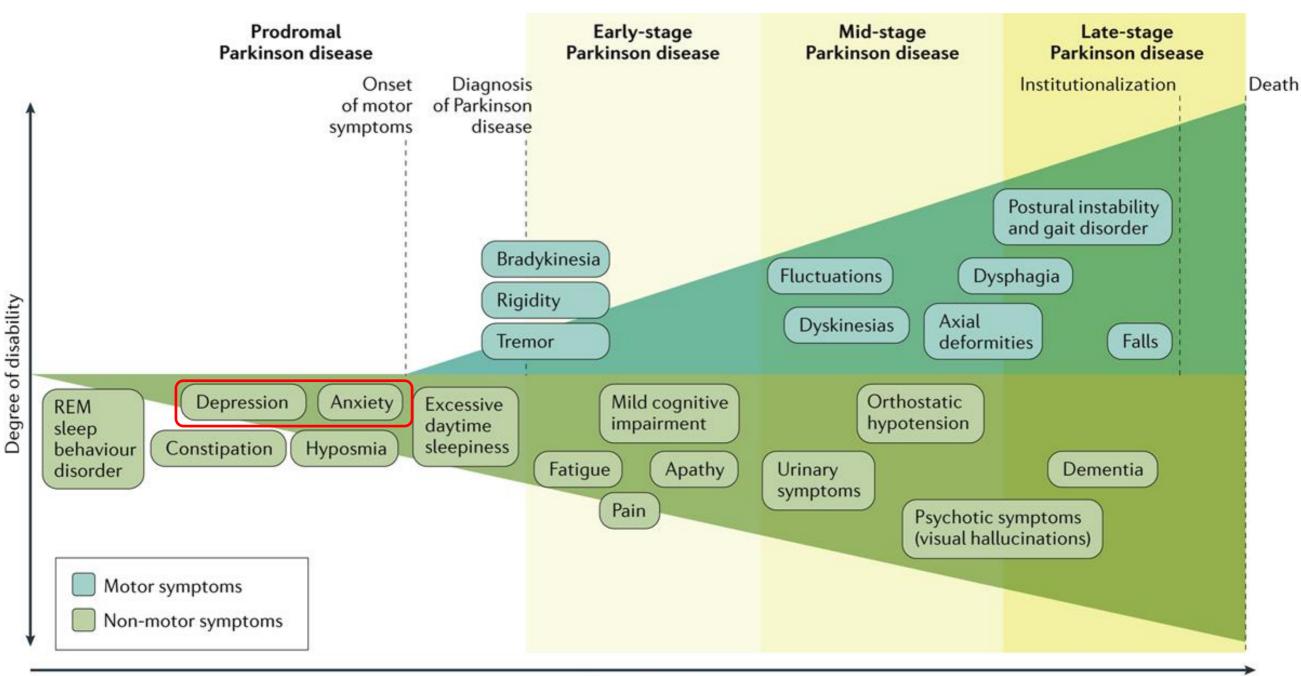
Impulse control disorder (13.6%)

Psychosis (40%)

Schapira, Chaudhuri & Jenner, 2017 Weintraub et al., 2010

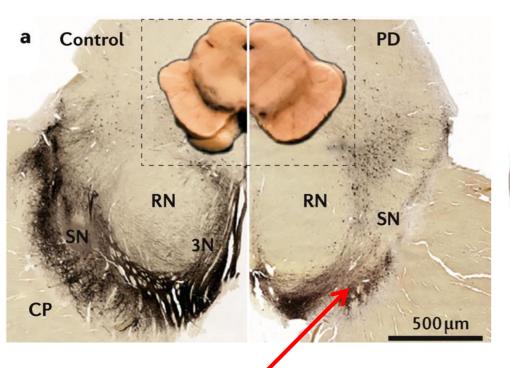


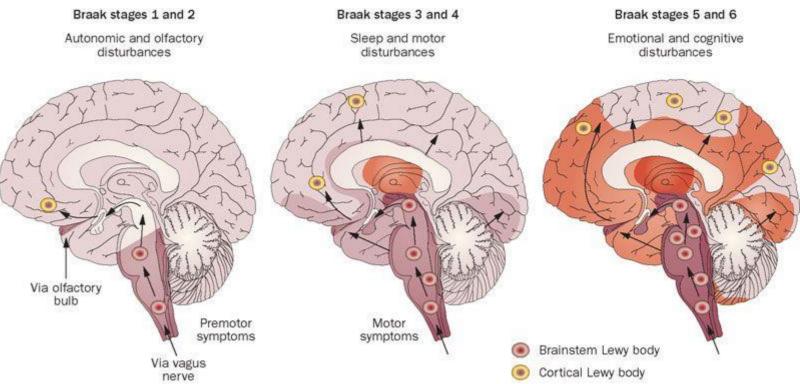
# Are there psychological issues in Parkinson's?





# What causes the psychological issues in Parkinson's?

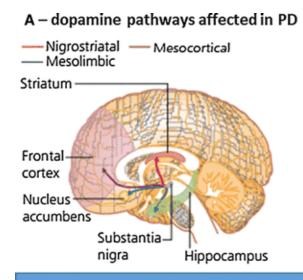




### Depigmentation of substantia nigra

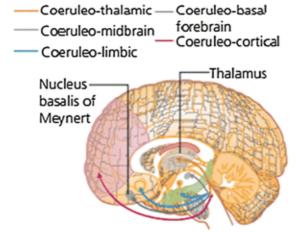
### Abnormal deposition of $\alpha$ -synuclein Lewy bodies

Doty, 2012



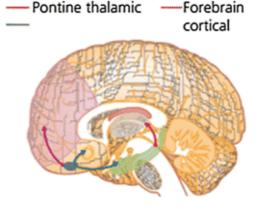
Motor: Tremor, bradykinesia, rigidity NMS: Depression, pain, apathy

### B – noradrenergic pathways affected in PD



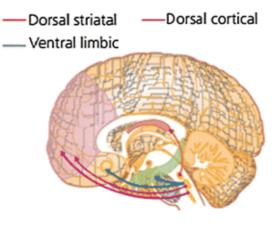
Motor: Akinetic rigid PD (Espay et al, 2014), Dyskinesia's NMS: Depression, anxiety, apathy, OH

### C – cholinergic pathways affected in PD



Motor: ? 'ON' related freezing NMS: MCI, dementia, ?urinary dysfunction

### D - serotonergic pathways affected in PD



Motor: ?levodopa induced dyskinesia's NMS: fatigue, depression, anxiety, sleep dysfunction



# What causes the psychological issues in Parkinson's?

### **Predisposing factors**

Previous personal or family history of mental health or relationship issues causing reduced self-esteem, maladaptive coping styles and reduced access to social support. Illness beliefs and role expectations may also be important.

### The problem

**Anxiety & depression** 

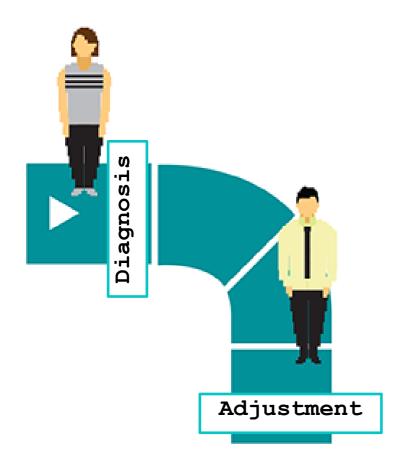
### **Precipitating factors**

Loss of physical, cognitive, social and occupational abilities, and reduced sense of control.

### **Prolonging factors**

Reduced participation, social isolation and limited finances.





### **Adjustment to diagnosis**

Normal to have period of grieving and adjustment to living with chronic neurodegenerative condition.

People can get stuck and may require extra support.

May benefit from referral to local counselling, IAPT or neuropsychology, or self-referring to Parkinson's UK local groups for support.



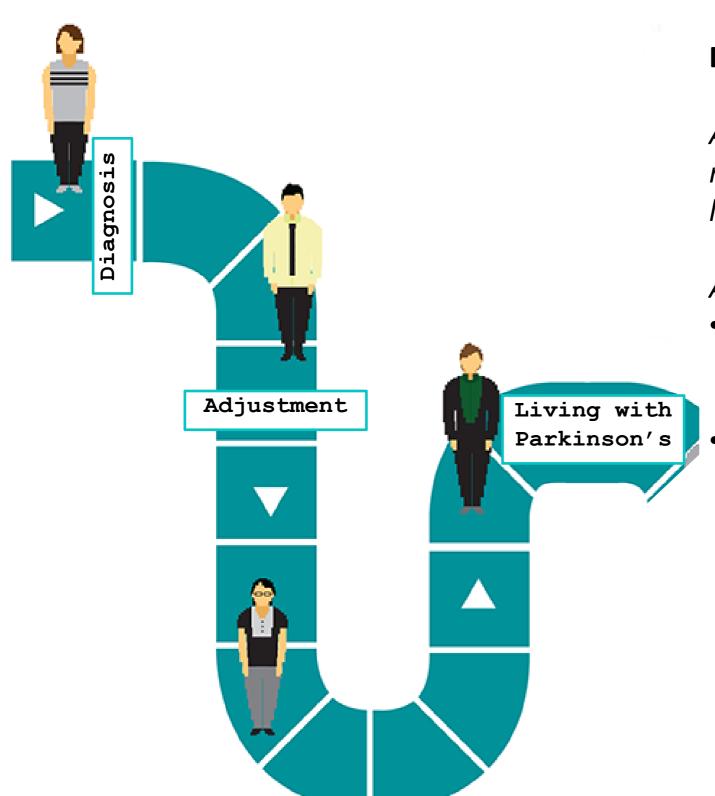
# Queen Square workgroup for Parkinson's



I liked meeting others with Parkinson's. I liked the option to talk about things with people who understood. It offered new concepts and ideas about my condition and its management.

There's a common bond between us and we're able to freely speak. We have an understanding of what we're all going through. It's really good because you don't usually get it outside.





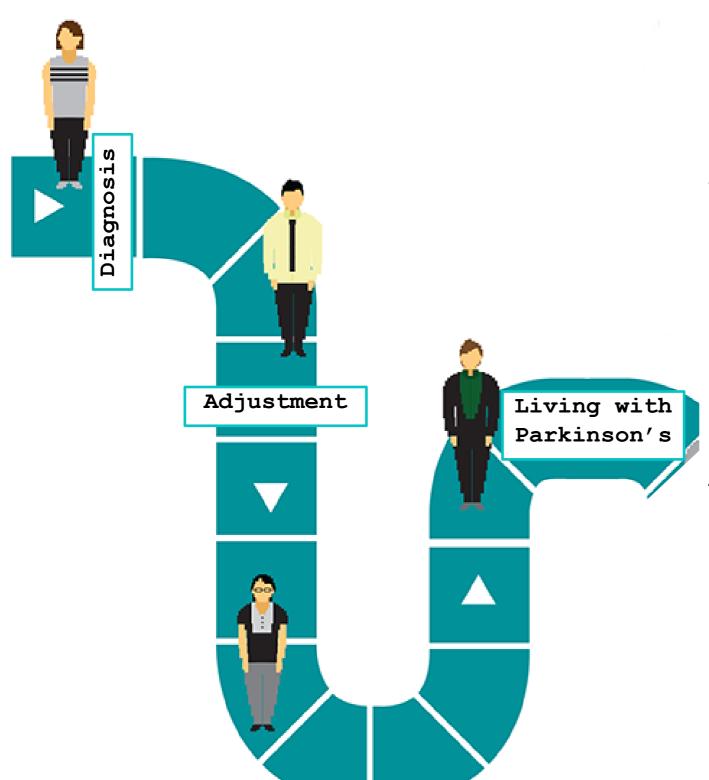
### **Depression**

As people become more symptomatic, they may develop greater difficulties coping and living with Parkinson's.

### **Assessment**

- Geriatric Depression Scale best tool for assessing mood avoiding motor symptoms, using cut-off of 7.
- If significant and impacts upon quality of life, may benefit from psychological therapy.





### **Anxiety**

83% experience anxiety despite pharmacotherapy (Dissanayaka et al., 2017).

### Features:

- Social anxiety
- Panic
- General anxiety.

### Assessment:

- Features of anxiety often overlap with Parkinson's symptoms (e.g. sleep disturbance, feeling restless).
- If significant and impacts upon quality of life, may benefit from psychological therapy.



### Treatment: Cognitive Behavioural Therapy

Individual – RCTs have shown that CBT can lead to significant improvements in depression and anxiety in medication non-responders (Dobkin et al., 2007; 2011; Farabaugh et al., 2010).

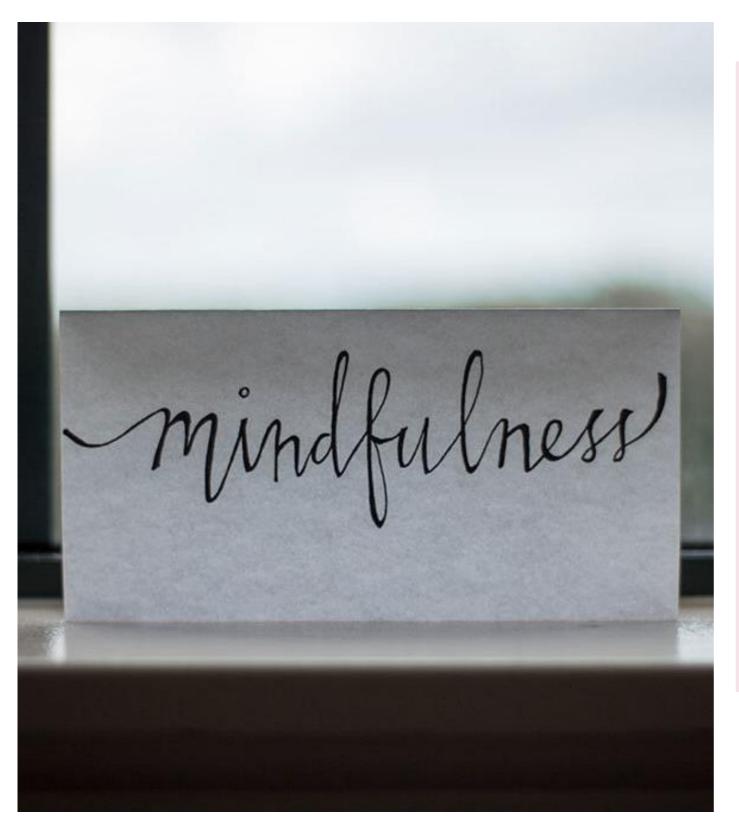
**Group** – studies reveal that depression and anxiety reduce following 12-week group CBT, but not after psychoeducation only (Berardelli et al., 2018; Feeny et al, 2005; Troeung et al., 2014).

**Telephone** – small (uncontrolled) studies suggest telephone CBT may help reduce anxiety and depression (Dobkin et al., 2011, 2018; Veazey et al., 2009).

**Predictors of success**: additional carer support and lesser cognitive impairment (Dobkin et al., 2012).





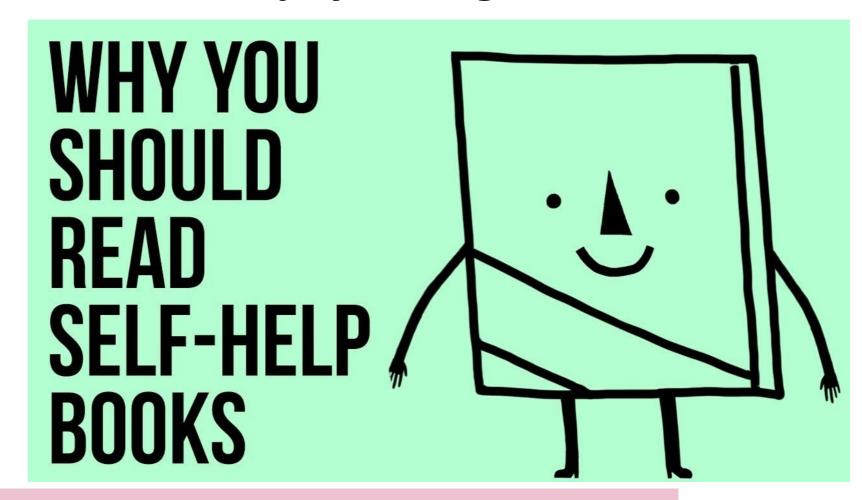


**Treatment: Mindfulness** 

**Group** – although studies have shown improvement in anxiety and depression using mindfulness-based stress reduction (Birtwell et al., 2017; Cash et al., 2016; Dissanayaka et al., 2016), two RCTs did not show an advantage over waiting list control (Advocat et al., 2016), particularly for anxiety (Rodgers et al., 2019), and some report high drop out (25%; Cash et al., 2016).

**Skype** – a study is investigating whether Skype is useful for delivering mindfulness-based interventions (Bogosian et al., 2017).





Treatment: Self-help

Using a workbook tailored to the needs of people with Parkinson's and depression was well-received and useful in reducing anxiety and depression, with no difference from telephone-based CBT (Dobkin et al., 2018).

Worry and intolerance of uncertainty reduced with CBT self-help resource 'What? Me Worry!?!', but with no difference from controls at 3 months (Lawson et al., 2013).



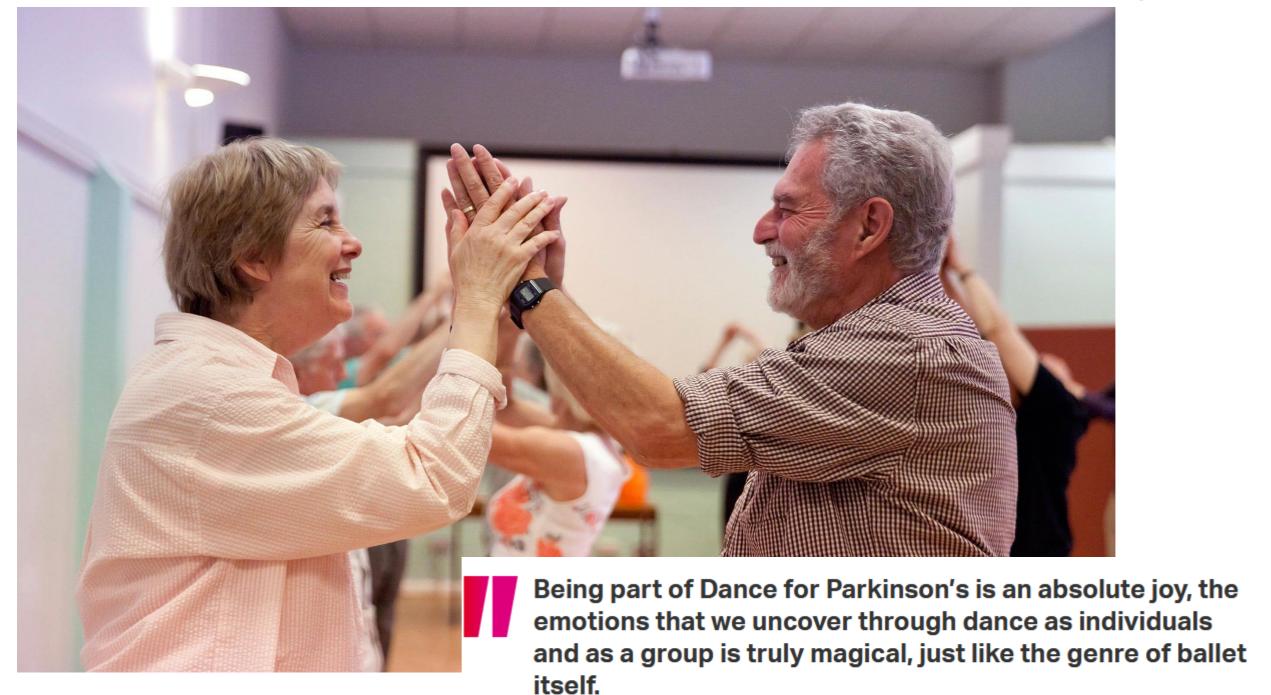
Treatment: Psychodynamic psychotherapy





# Other types of therapy...

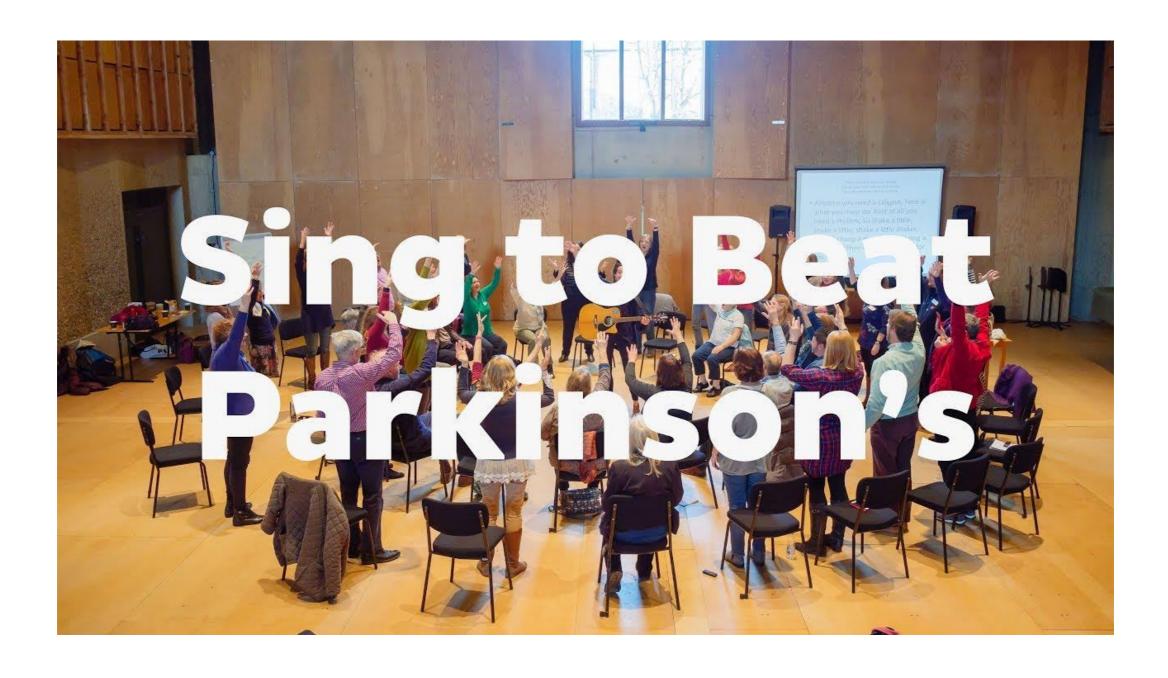




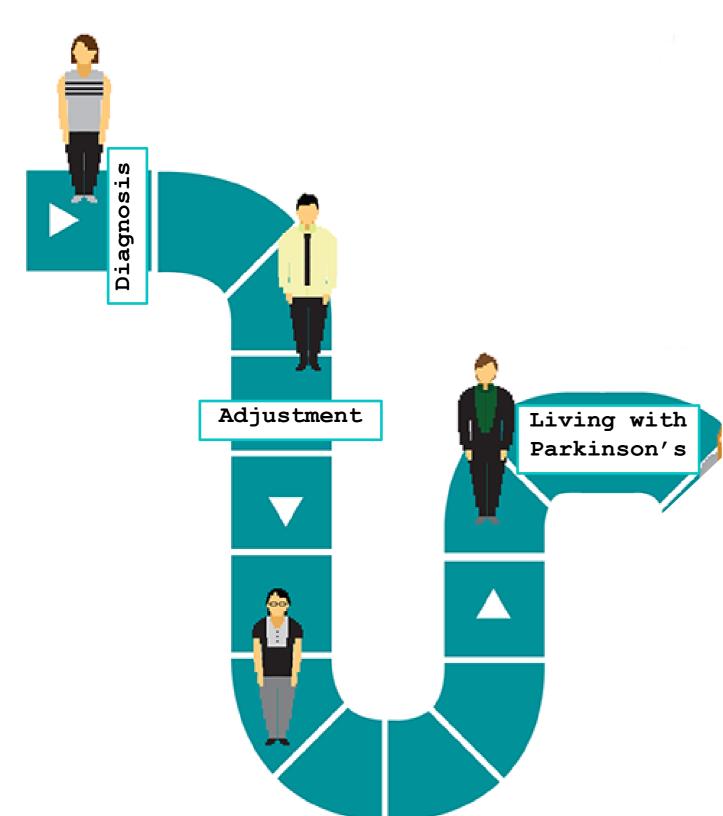
PARTICIPANT, DANCE FOR PARKINSON'S LONDON



# Other types of therapy...







### Complex cases: impulse control disorder

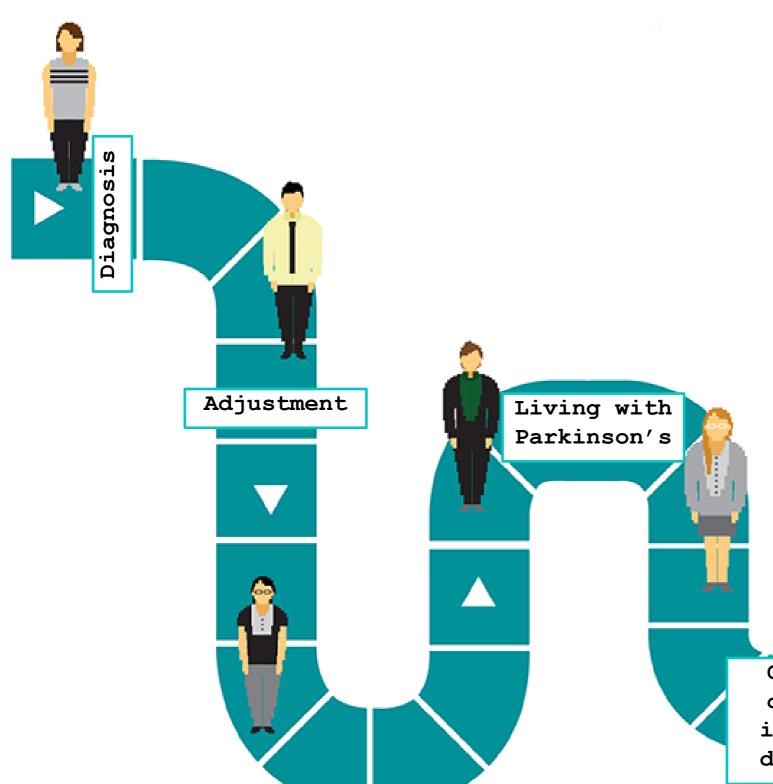
Triggered by dopamine agonist medication and causing hypersexuality, pathological gambling or reckless spending.

CBT can be helpful (Jimenez- Murcia et al., 2012; Okai et al., 2013), especially those with less psychiatric burden and better social function (Okai et al., 2014), but symptoms diminish following medication reduction.

Patient may become low (withdrawal syndrome) and need specialist neuropsychiatric support.

Patients grieving for losses may benefit from psychological therapy. Relationship issues may benefit from couple therapy.





Complex cases: psychology affecting physical symptoms

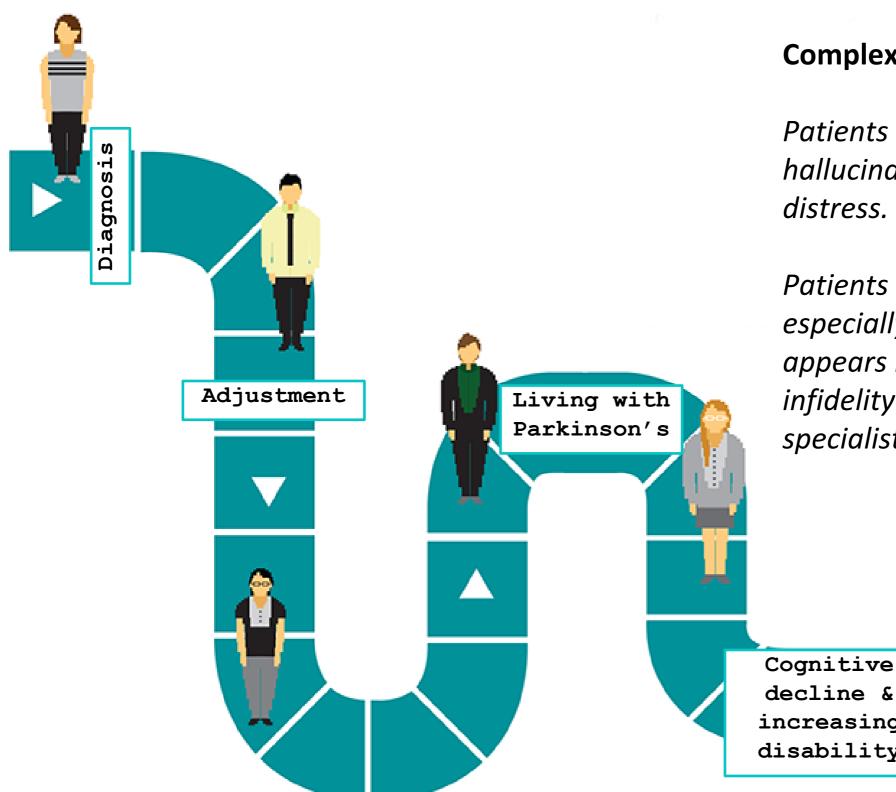
Can develop complex interactions between physical and psychological factors.

Psychological factors may contribute to freezing of gait, fear of falls, 'off' period anxiety, etc.

Patients may require specialist support that involves neurological, neuropsychiatric and neuropsychological care.

Cognitive decline & increasing disability





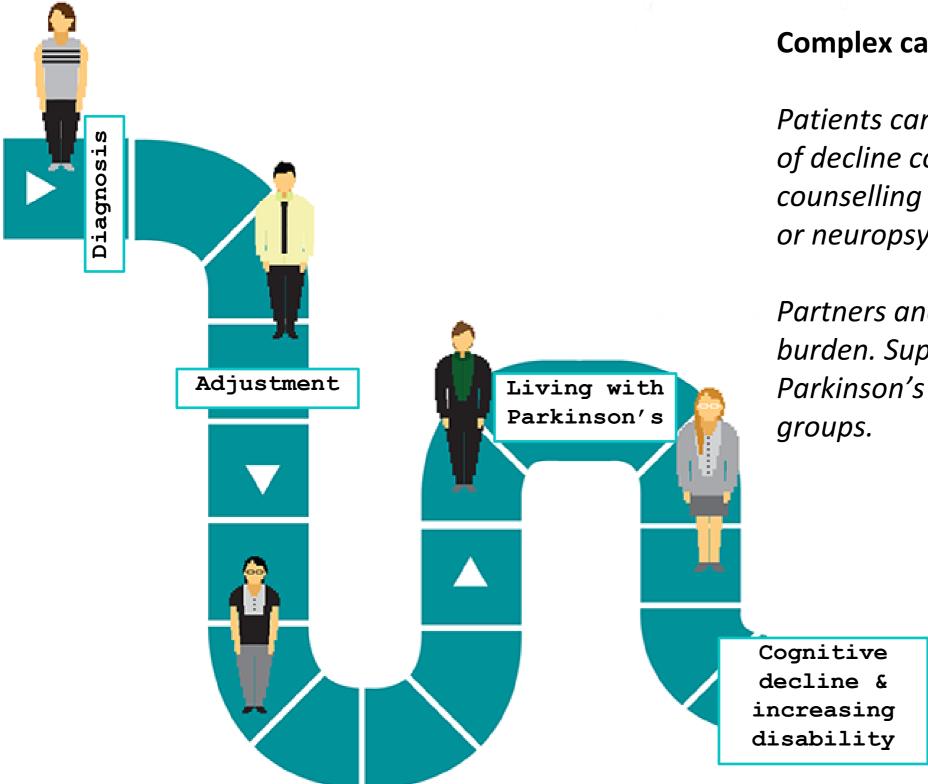
**Complex cases: psychosis** 

Patients can develop visual hallucinations. These rarely cause distress.

Patients can develop delusions, especially delusional jealousy. This appears linked with early experience of infidelity (Foley et al., 2017). Requires specialist neuropsychiatry support.

decline & increasing disability





### **Complex cases: dementia**

Patients can develop low mood in face of decline cognition. May benefit from counselling through neuropsychology or neuropsychiatry.

Partners and families have heavy care burden. Support can be provided by Parkinson's UK and local carers groups.



# Queen Square Parkinson's dementia carer support (Dr Rimona Weil & Dr Jennifer Foley)



Pilot study to deliver Strategies for Relatives (START) to carers of people with Parkinson's dementias

Focusses on managing difficult behaviours, looking after oneself and planning for future

8-sessions of individual manualised therapy, delivered by phone or face-to-face

Carers given manual, therapy plan and relaxation music

"Some of the problems that we eventually had to face had been discussed, making me aware of them and able to care better."







### **Summary**

People with Parkinson's often report psychological issues as most disabling aspect of their illness.

Psychological issues are very common, but differ across disease duration and can interact with physical symptoms.

People with Parkinson's may benefit from psychological therapy (individual, group or telephone-based), but may require specialist neuropsychology support and/or multidisciplinary care.

Person-centred integrated care should optimise both physical and mental health.



The UK Parkinson's Excellence Network is the driving force for improving Parkinson's care

 Open to all health and social care professionals at all levels



- Learning: online learning options for all disciplines
- Resources: workforce development resources including guides, tools and films
- Collaboration: share learning with health and social care professionals improving Parkinson's care locally, and across the UK

### **Mental Health Hub**

For those interested in all things mental health and Parkinson's: parkinsons.org.uk/professionals/mental-health-hub

Find out more at parkinsons.org.uk/excellencenetwork

Queen Square Parkinson's neuropsychology service: Jennifer.Foley@nhs.net