

# Parkinson's Disease Current Awareness Bulletin June 2019

A number of other bulletins are also available – please contact the Academy Library for further details

If you would like to receive these bulletins on a regular basis please contact the library.

If you would like any of the full references we will source them for you.

Contact us: Academy Library 824897/98 Email: ruh-tr.library@nhs.net Title: The introduction of a Parkinson's disease email alert system to allow for early specialist team review of inpatients.

**Citation:** BMC health services research; Apr 2019; vol. 19 (no. 1); p. 271 **Author(s):** Hobson, Peter; Roberts, Sally; Davies, Glesni

**Background:** Patients with Parkinson's disease (PWP) have complex healthcare needs, and compared to the general population, are more likely to have an unplanned emergency department (ED) attendance to hospital, along with poorer outcomes. Innovative methods of notification, when patients have an ED attendance are needed to allow for earlier specialist team interventions. This study describes the introduction of an email alert (e-alert) for a specialist Parkinson's team. In addition, the reason for admission, specialist team interventions, length of stay, frequency of readmission, discharge destination, mortality and the bed cost per ED attendance or admission episode will be explored.

**Methods:** The e-alert was developed in collaboration with academics, a Parkinson's specialist team and hospital Information technology (IT) specialists, by employing existing software and IT system platforms. Patients were identified from an existing hospital patient administration and a specialist movement disorder database. Specific variables along with routine patient data were collected including demographics, clinical variables, specialist team interventions, reason for admission, length of stay, discharge destination, unscheduled readmission, mortality and bed cost per day.

**Results:** The initial programming and setup of the e-alert was estimated to be around £3000. In its first six months, the e-alert identified 75 ED attendances, with the most common reasons being, falls and infections. The overall mean LOS was 6.8 days, with 25/75 patients being readmitted within 28 days. The most common specialist team clinical interventions were changes in medication, assessment for postural hypotension, neuropsychiatric and swallowing assessments. The majority of patients (92%) were discharged to their normal place of residence. The crude mortality rate for the cohort was approximately twice that of the hospital average. The total ED and acute bed cost was estimated to be £354,805.88, with exponential rises in healthcare costs when LOS was greater than one day.

**Conclusions:** The Parkinson's e-alert was found to a useful adjunct to existing hospital data systems in identifying PWP who have unplanned emergency attendances. Additionally, this system can also be employed as a service evaluation tool. However, further evaluation is needed to determine if this system can improve patient outcomes during their unplanned emergency attendance to hospital.

Title: Physiotherapy Versus Physiotherapy Plus Cognitive Training on Cognition and Quality of Life in Parkinson Disease: Randomized Clinical Trial.

**Citation:** American Journal of Physical Medicine & Rehabilitation; Jun 2019; vol. 98 (no. 6); p. 460-468

Author(s): Mariano Barboza, Natália; Brandão Terra, Marcelle; Brandão Bueno, Maria Eduarda; Christofoletti, Gustavo; Smaili, Suhaila Mahmoud

**Objective:** The aim of the study was to verify the effectiveness of physiotherapy associated with cognitive training to improve cognition and quality of life in individuals with Parkinson disease.

**Design:** This is a randomized clinical trial involving 58 individuals with mild to moderate Parkinson disease, randomly distributed into two groups: motor group and cognitive-motor group. Both groups were assessed for cognition and quality of life at the beginning of the study, at the end of the intervention protocols, and 3 mos after the end of the intervention. The following instruments were used to assess cognition and quality of life: Mini-Mental State Examination, Montreal Cognitive Assessment, Verbal fluency test, Rey Auditory Verbal Learning Test, Cognitive and perceptual assessment by pictures, Trail Making Test, Clock Drawing Executive Test, and Parkinson Disease Quality of Life Questionnaire. The motor group engaged in motor physiotherapy, whereas the cognitive-motor group underwent combined motor physiotherapy with cognitive training.

**Results:** The intragroup analysis revealed that both groups presented improved cognition (memory and visuospatial function domains) and quality of life after execution of the protocols, but without statistically significant intergroup differences.

**Conclusions:** When comparing the intervention moments, the two treatment approaches used were effective for the outcomes: memory, visuospatial function, and quality of life in both groups.

Title: Safety and Tolerability of Pharmacotherapies for Parkinson's Disease in Geriatric Patients.

**Citation:** Drugs & Aging; Jun 2019; vol. 36 (no. 6); p. 511-530 **Author(s):** Klietz, Martin; Greten, Stephan; Wegner, Florian; Höglinger, Günter U.

**Abstract:** Parkinson's disease is a chronic neurodegenerative movement disorder affecting people mainly beyond their 50s. Geriatric patients with Parkinson's disease experience a specific profile of comorbidities. Multimorbidity and resulting polypharmacotherapy are frequent at this age. Comorbid diseases, widely spread, involve arterial hypertension, ischemic heart disease, heart failure, atrial fibrillation, polyneuropathy, diabetes mellitus, cerebrovascular disease, sarcopenia, and frailty. Following years of drug development, levodopa is still the most effective drug for the treatment of motor symptoms. However, a wide range of other drugs are available with specific effects, contraindications, and complications. The treatment of geriatric patients with Parkinson's disease is challenging and requires the cooperation of multidisciplinary teams. A careful assessment of a patient's Parkinson's disease symptoms, comorbidities, medication, vital signs, and resources is crucial for an effective and safe therapy. Laboratory tests can assist in the identification of contraindications for specific treatments. Identifying potentially inadequate drugs from prescription lists can lead to a better targeted treatment for geriatric patients with Parkinson's disease. Future research should help develop a more evidence-based therapy of geriatric patients with Parkinson's disease. For this purpose, randomized controlled trials of geriatric patients are urgently needed. An international register concerning issues of safer drug application and monitoring could help to implement a better treatment.

Title: Improving care home life for people with Parkinson's.

**Source:** Nursing & Residential Care; Jun 2019; vol. 21 (no. 6); p. 309-316 **Author(s):** Oates, Lloyd; Hand, Annette; Dismore, Lorelle; Gray, William; Walker, Richard

**Abstract:** Lloyd Oates, Annette Hand, Lorelle Dismore, William Gray and Richard Walker discuss a study they carried out into the wellbeing of people with Parkinson's disease in care homes and make a number of recommendations based on thematic analysis of the data.

Title: Mindfulness Yoga Offers Relief from Depressive Symptoms in Parkinson's Disease, Study Finds.

**Citation** Neurology Today; May 2019; vol. 19 (no. 10); p. 11-12 **Author(s):** Lehmann, Christine

**Abstract:** In a randomized trial with Parkinson's disease patients, researchers found a yoga program that focused on mindfulness was more effective in alleviating anxiety than a more standard exercise program of stretching and resistance training.

### Title: Highlighting the goals for Parkinson's care: commentary on NICE Guidelines for Parkinson's in Adults (NG71).

**Citation:** Age & Ageing; May 2019; vol. 48 (no. 3); p. 323-326 **Author(s):** Brock, Peter; Fisher, James M; Hand, Annette; Walker, Richard W

Abstract: Parkinson's disease is a chronic multi-system disease that can cause motor and non-motor symptoms, cognitive changes and variably effective medications. Optimal management of the condition requires a multi-disciplinary team of healthcare professionals to work closely with the patient and their carers. The National Institute for Health and Care Excellence published updated guidelines on managing Parkinson's disease in adults in 2017. Here we discuss the implications of this guidance to current healthcare professionals involved in the care of people with Parkinson's disease. The guidance highlights the importance of clear communication with people with Parkinson's disease. We discuss examples of this, including providing a point of contact with specialist services for people with Parkinson's disease and ensuring information about the risks of impulse control disorders are given to people on dopaminergic therapy. The breadth of services required by people with Parkinson's disease is also described, including the need for access to physiotherapy, occupational therapy and speech and language therapy as well as treatment monitoring services for Clozapine. In addition, we emphasise the continued importance of ensuring people with Parkinson's disease receive their medications on time when in hospital or a care home.

# Title: Changing the treatment paradigm for Parkinson's disease psychosis with pimavanserin.

Citation: Expert review of clinical pharmacology; Jun 2019

**Author(s):** Lyons, Kelly E; Pahwa, Rajesh; Hermanowicz, Neal; Davis, Thomas; Pagan, Fernando; Isaacson, Stuart

**Introduction:** Parkinson's disease psychosis (PDP) may affect up to 60% of patients with Parkinson's disease over the course of their disease, and is associated with poor prognosis, including increased risks of mortality and nursing home placement. PDP treatments have been limited to off-label use of atypical antipsychotics, most of which pose risks of worsened motor symptoms and other potential adverse events (AEs) due to their dopamine receptor blockade and additional off-target receptor affinities. Pimavanserin is a highly selective 5-HT2A inverse agonist and poses no known risks for worsening of parkinsonism or other off-target receptor AEs. Pimavanserin is the first and only medication approved for PDP treatment. Areas covered: This review covers estimated prevalence, clinical characteristics,

diagnostic criteria, and risk factors for PDP; the hypothetical progression of PDP; management of PDP including use of antipsychotics; pharmacology and clinical trial data on pimavanserin; and expert opinion on PDP treatment. The NLM/PubMed database was searched for papers using the search terms of PDP AND treatment AND pimavanserin for the last 10 years.

**Expert opinion:** The recent insights into PDP pathophysiology and approval of the only medication specifically to treat PDP are key advances that should improve the recognition, diagnosis, and management of PDP.

### Title: Improving patient-centred care for persons with Parkinson's: Qualitative interviews with care partners about their engagement in discussions of "off" periods.

**Citation:** Health expectations : an international journal of public participation in health care and health policy; Jun 2019; vol. 22 (no. 3); p. 555-564

Author(s): Rastgardani, Tara; Armstrong, Melissa J; Marras, Connie; Gagliardi, Anna R

**Objective:** This study explored how care partners (CPs) of persons with Parkinson's (PwP) are engaged in discussions of "off" symptoms.

**Methods:** During qualitative interviews, CPs of PwP sampled by convenience through the Michael J Fox Foundation online clinical trial matching service were asked to describe their familiarity with "off" symptoms, how "off" symptoms were discussed with clinicians, and the impact of "off" symptoms on them. Data were analysed using constant comparative technique by all members of the research team.

**Results:** A total of 20 CPs were interviewed. Compared with PwP, they were more likely to describe "off" symptoms to clinicians. CPs identified important aspects of patient-centred care for PD: establishing a therapeutic relationship, soliciting and actively listening to information about symptoms, and providing self-management support to both PwP and CPs. CPs said that clinicians did not always engage CPs, ask about "off" symptoms or provide self-management guidance, limiting their ability to function as caregivers.

**Conclusion:** By not engaging and educating CPs, "off" symptoms may not be identified or addressed, leading to suboptimal medical management and quality of life for PwP. These findings must be confirmed on a broader scale through ongoing research but suggest the potential need for interventions targeted at clinicians and at CPs to promote patient-centred care for PwP.

Title: Indirect Comparison of Ropinirole and Pramipexole as Levodopa Adjunctive Therapy in Advanced Parkinson's Disease: A Systematic Review and Network Meta-Analysis.

Citation: Advances in therapy; Jun 2019; vol. 36 (no. 6); p. 1252-1265

**Author(s):** Zhao, Hongxin; Ning, Yi; Cooper, James; Refoios Camejo, Rodrigo; Ni, Xiajun; Yi, Bingming; Parks, Daniel

**Introduction:** To evaluate the comparative efficacy and safety of ropinirole and pramipexole as adjunctive therapies to levodopa (L-dopa) for the management of advanced Parkinson's disease (PD), via a systematic review and network meta-analysis.

**Methods:** Twenty-one double-blind randomised controlled trials of patients with advanced PD with motor fluctuations receiving L-dopa comparing ropinirole or pramipexole with comparators were identified from 2550 publications. Bayesian indirect comparison methods

were applied to independently review efficacy outcomes including off-time reduction, Unified Parkinson's Disease Rating Scale-Activity of Daily Living (UPDRS-ADL) and UPDRS-motor scores, and safety outcomes including adverse events (AE) and patient withdrawals, to determine indirect treatment comparison mean differences (MD) or hazard ratios (HR) with 95% confidence intervals (CI).

**Results:** The indirect efficacy comparison resulted in a statistically nonsignificant off-time reduction difference (hours) of ropinirole-sustained release (SR) versus pramipexole-immediate release (MD - 0.25; 95% CI - 0.71, 0.21) and ropinirole-SR versus pramipexole-extended release (ER) (MD 0.18; 95% CI - 0.40, 0.76). Ropinirole-SR adjunctive treatment showed a tendency towards more improvement in UPDRS-ADL score (MD 1.24; 95% CI 0.23, 2.24) than adjunctive treatment of pramipexole-ER. Pramipexole-ER may be less likely to induce somnolence as an AE compared with ropinirole-SR (HR 0.46; 95% CI 0.23, 0.89). However, there were no statistically significant differences in UPDRS-motor score reduction, incidence of dyskinesia, hallucination, hypotension, insomnia and nausea, or withdrawals due to AE, for any reason.

**Conclusion:** Adjunctive therapy with ropinirole-SR or pramipexole appears to offer similar efficacy and tolerability in patients with advanced PD on the basis of this indirect comparison.

### Title: Mild cognitive impairment in Parkinson's disease: Characterization and impact on quality of life according to subtype.

**Citation:** Geriatrics & gerontology international; Jun 2019; vol. 19 (no. 6); p. 497-502 **Author(s):** Vasconcellos, Luiz Felipe R; Pereira, João S; Charchat-Fichman, Helenice; Greca, Denise; Cruz, Manuela; Blum, Ana Lara; Spitz, Mariana

**Aim:** Mild cognitive impairment (MCI) was initially described as a risk factor for Alzheimer's disease. Because of differences in baseline cognitive abilities, MCI in Parkinson's disease (PD; PD-MCI) requires distinct neuropsychological criteria for diagnosis and follow up. In addition to representing a risk factor for PD-related dementia, PD-MCI results in higher morbidity, which can be reduced through early detection. The aim of the present study was to gather data regarding MCI subtypes from neuropsychological profiles and clinical features in PD patients, to evaluate its impact on patients' quality of life according to subtype, and to compare the data with a control (Co) group.

**Method:** A total of 149 individuals were selected: 81 controls and 60 patients diagnosed with PD according to the United Kingdom Parkinson's Disease Society Brain Bank criteria. All individuals were submitted to neurological and neuropsychological assessments.

**Results:** The amnestic subtype of MCI was the most common in both the PD and Co groups. PD patients showed greater impairment in MCI than the Co group. The amnestic subtype of PD-MCI was associated with a lower quality of life compared with the non-amnestic group.

**Conclusions:** The PD group showed worse cognitive performance than the Co group. The amnestic subtype of PD-MCI was associated with the greatest impairment of quality of life. Geriatr Gerontol Int 2019; 19: 497-502.

Title: Treadmill training may be an effective form of task-specific training for improving mobility in people with Parkinson's disease and multiple sclerosis: a systematic review and meta-analysis.

Citation: Physiotherapy; Jun 2019; vol. 105 (no. 2); p. 174-186

#### Author(s): Robinson, Alexandra G; Dennett, Amy M; Snowdon, David A

**Background:** Task-specific training is an effective form of rehabilitation for improving mobility in neurological conditions. However, it remains unclear if task-specific training is effective in people with progressive disease.

**Objective:** To establish the efficacy of task-specific training on the mobility of individuals with progressive neurological conditions.

**Data Sources:** Electronic databases MEDLINE, EMBASE, CINAHL and Cochrane Database of Systematic Reviews.

**Study Eligibility Criteria:** Randomised controlled trials investigating the effect of taskspecific training on mobility and falls rate in individuals with progressive neurological conditions.

**Study Appraisal/Synthesis Methods:** Risk of bias of individual studies was assessed using the Physiotherapy Evidence Database (PEDro) Scale. Mean differences (MD) and 95% confidence intervals were calculated and combined in meta-analysis.

**Results:** Analysis of 16 trials found treadmill training improved comfortable walking velocity (m/second) in people with Parkinson's disease (MD 0.21m/second, 95%CI 0.15 to 0.27) and multiple sclerosis (MD 0.36m/second, 95%CI 0.20 to 0.52). Treadmill training improved stride length (m) (MD 0.12m, 95%CI 0.02 to 0.23) and step length (m) (MD 0.12m, 95%CI 0.01 to 0.23) in people with Parkinson's disease and walking endurance in people with multiple sclerosis (MD 26.53m, 95%CI 12.23 to 40.84). Treadmill training had no effect on cadence and did not improve walking endurance in Parkinson's disease or multiple sclerosis.

Limitations: Study sample sizes were small and findings must be interpreted with caution.

**Conclusion:** Treadmill training may be effective for improving mobility in people with Parkinson's disease and multiple sclerosis. The effectiveness of over-ground walking is uncertain.

Systematic Review: Prospero Registration Numbercrd: 42016047334.

## Title: Excessive daytime sleepiness and its impact on quality of life in de novo Parkinson's disease.

**Citation:** Neurological sciences : official journal of the Italian Neurological Society and of the Italian Society of Clinical Neurophysiology; Jun 2019; vol. 40 (no. 6); p. 1151-1156 **Author(s):** Yoo, Sang-Won; Kim, Joong-Seok; Oh, Yoon-Sang; Ryu, Dong-Woo; Lee, Kwang-Soo

**Abstract:** Excessive daytime sleepiness (EDS) is one of the most common sleep problems in patients with Parkinson's disease (PD); however, its clinical implications are not clear, especially in early stage, non-medicated PD patients. This study investigated EDS in Korean patients with de novo PD and its impact on quality of life. This cross-sectional study was carried out with 198 PD patients who underwent a structured clinical interview and examination based on common and conventional scales. Motor and nonmotor symptoms were assessed by the Unified Parkinson's Disease Rating Scale (UPDRS) and Non-Motor Symptoms Scale (NMSS). EDS was evaluated with the Epworth Sleepiness Scale (ESS), the nocturnal disabilities and nighttime sleep problems were assessed with Parkinson's Disease Sleep Scale 2nd version, and quality of life was measured with the Parkinson's Disease Quality of Life 39 (PDQ-39). The relationships between ESS score and each scale were investigated. Among the patients studied, 42 patients had EDS defined as ESS > 10.

Patients with EDS had a higher motor burden, greater nocturnal disabilities, more severe non-motor symptoms, and lower quality of life than did patients without EDS. Partial correlations revealed that ESS score was related to PDQ-39 summary index, irrespective of age, body mass index, or disease duration. These results show that EDS can have an immense negative impact on quality of life. The causes of EDS are multifactorial, which complicates its treatment. Further investigations are required to determine the safety and efficacy of potential EDS therapies and to develop novel EDS treatments in PD.

## Title: Parkinson's disease among migrants in Europe: estimating the magnitude of an emerging phenomenon.

**Citation:** Journal of neurology; May 2019; vol. 266 (no. 5); p. 1120-1126 **Author(s):** Canevelli, Marco; Bruno, Giuseppe; Valletta, Martina; Fabbrini, Andrea; Vanacore, Nicola; Berardelli, Alfredo; Fabbrini, Giovanni

**Introduction:** The occurrence of age-related pathological conditions among subjects with a migration background and composing ethnic minorities is an emerging challenge for Western countries. Specifically, the onset of neurodegenerative diseases in these populations of individuals might assume special relevance and generate additional complexities for our healthcare systems. The aim of the present study was to estimate the number of Parkinson's disease (PD) cases in migrant subjects living in Europe.

**Methods:** The estimated cases of PD among  $\geq$  50-year-old migrants living in Europe, and in each of the 32 considered countries, were calculated by multiplying the number of migrants (derived by the Eurostat data) with the age-specific prevalence rates of PD (obtained by a recent meta-analysis).

**Results:** Nearly 20 million migrants  $\geq$  50 years lived in Europe in 2017. The application of the age-specific prevalence rates led to the estimation of 129,645 overall PD cases in this population, accounting for the 8% of overall PD cases in Europe. National estimates widely ranged from 36 cases in Iceland to 29,390 cases in France.

**Conclusion:** The present findings suggest that the occurrence of PD in migrants and minority groups already constitutes an important issue for European healthcare systems and will assume further relevance given the rapidly evolving sociodemographic scenario. Characterizing the phenomenon at the "real world" level and implementing coordinated initiatives and strategies represent novel but pressing needs for our countries.

## Title: Cognitive behavioral therapy improves diverse profiles of depressive symptoms in Parkinson's disease.

**Citation:** International journal of geriatric psychiatry; May 2019; vol. 34 (no. 5); p. 722-729 **Author(s):** Dobkin, Roseanne D; Mann, Sarah L; Interian, Alejandro; Gara, Michael A; Menza, Matthew

**Objective:** Depression is among the most common and debilitating nonmotor complaints in Parkinson's disease (PD), yet there is a paucity of controlled research to guide treatment. Little research has focused on the extent to which specific depressive symptom profiles may dictate unique clinical recommendations to ultimately improve treatment outcomes. The current study examined the impact of cognitive behavioral therapy (CBT) on different types of depressive symptoms in PD. It was hypothesized that the cognitive (eg, guilt, rumination, and negative attitudes towards self) and behavioral (eg, avoidance and procrastination) symptoms targeted most intensively by the treatment protocol would show the most robust

response. The extent to which stabilized antidepressant use moderated specific symptom change was examined on an exploratory basis.

**Method:** Eighty depressed people with PD participated in a randomized controlled trial of CBT plus clinical management, versus clinical management only. Hamilton Depression Rating Scale (HAMD) and Beck Depression Inventory (BDI) subscale scores, reflecting depressive symptom heterogeneity in PD, were the focus of this investigation.

**Results:** CBT response was associated with significant improvements in mood, sleep, anxiety, and somatic symptoms (HAMD), and negative attitudes toward self, performance impairment, and somatic symptoms (BDI). As hypothesized, the largest effect sizes were observed for cognitive and behavioral (vs somatic) symptoms of depression. Stabilized antidepressant use moderated the effect of CBT on somatic complaints (HAMD and BDI).

**Conclusions:** CBT may improve a diverse array of depressive symptoms in PD. Cognitive and behavioral (vs somatic) symptoms showed the greatest change. Combining CBT with antidepressants may help optimize the management of somatic complaints in depression in PD (dPD).

#### Title: Progress of Pharmacological Approaches in Parkinson's Disease.

**Citation:** Clinical pharmacology and therapeutics; May 2019; vol. 105 (no. 5); p. 1106-1120 **Author(s):** Zeuner, Kirsten E; Schäffer, Eva; Hopfner, Franziska; Brüggemann, Norbert; Berg, Daniela

**Abstract:** The progressive neurodegenerative process in Parkinson's disease (PD) is not restricted to dopaminergic midbrain neurons but involves the entire nervous system. In this review, we outline established treatment options at different disease stages and address new therapeutic approaches. These include, based on recent advances in the understanding of the pathophysiology of PD, genetic and disease-modifying approaches to reduce abnormal accumulation and aggregation of alpha-synuclein (aSYN), mitochondrial dysfunction, and dysfunction of lysosomal proteins. Moreover, we highlight clinical trials to reduce neuroinflammation and increase neurorestoration.

# Title: Why would Parkinson's disease lead to sudden changes in creativity, motivation, or style with visual art?: A review of case evidence and new neurobiological, contextual, and genetic hypotheses.

Citation: Neuroscience and biobehavioral reviews; May 2019; vol. 100 ; p. 129-165

**Author(s):** Lauring, Jon O; Ishizu, Tomohiro; Kutlikova, Hana H; Dörflinger, Felix; Haugbøl, Steven; Leder, Helmut; Kupers, Ron; Pelowski, Matthew

**Abstract:** Parkinson's disease (PD) is a devastating diagnosis with, however, potential for an extremely intriguing aesthetic component. Despite motor and cognitive deficits, an emerging collection of studies report a burst of visual artistic output and alterations in produced art in a subgroup of patients. This provides a unique window into the neurophysiological bases for why and how we might create and enjoy visual art, as well as into general brain function and the nature of PD or other neurodegenerative diseases. However, there has not been a comprehensive organization of literature on this topic. Nor has there been an attempt to connect case evidence and knowledge on PD with present understanding of visual art making in psychology and neuroaesthetics in order to propose hypotheses for documented artistic changes. Here, we collect the current research on this topic, tie this to PD symptoms and neurobiology, and provide new theories focusing on dopaminergic neuron damage, over-stimulation from dopamine agonist therapy, and context or genetic factors revealing the neurobiological basis of the visual artistic brain.

#### Title: Development of the Integrated Parkinson's Care Network (IPCN): using codesign to plan collaborative care for people with Parkinson's disease.

**Citation:** Quality of life research : an international journal of quality of life aspects of treatment, care and rehabilitation; May 2019; vol. 28 (no. 5); p. 1355-1364

**Author(s):** Kessler, Dorothy; Hauteclocque, Jennifer; Grimes, David; Mestre, Tiago; Côtéd, Diane; Liddy, Clare

**Background:** Parkinson's disease (PD) is a progressive neurological illness that impacts various aspects of life. Integration of medical and self-management in a collaborative approach to care is needed to enhance functioning and the quality of life of PD patients. In developing an integrated care program at a tertiary PD clinic, we used a co-design process to gather stakeholder input.

**Methods:** This is a cross-sectional mixed methods study using surveys and interviews. Patient and caregiver participants from the clinic completed two questionnaires to evaluate perceived receipt of self-management support (Patient Assessment of Care for Chronic Conditions) and activation for managing their health condition (Patient or Caregiver Activation Measure®). A subset of these participants and healthcare providers took part in semi-structured interviews. Survey data were described and tested for relationships between patient characteristics and questionnaire scores using Spearman's rank-order correlation. Interviews were analyzed using conventional content analysis.

**Results:** Fifty-seven PD patients and thirty caregivers completed the questionnaires. Thirteen patients, six caregivers, and six healthcare providers were interviewed. 58% of participants were moderately to highly activated to manage their lives with PD. Participants' perceptions of self-management support varied but was lacking in dimensions of goal-setting and follow-up support/coordination. Qualitative analysis revealed four overarching themes related to experiences of managing PD: activation, self-management support, coordinated care, and access to services.

**Conclusions:** This first study to explore patient activation in PD found high levels of activation but moderate to low levels of self-management support. The co-design process highlighted important aspects of a more collaborative approach to care.

## Title: Impacts of an Exercise Program and Motivational Telephone Counseling on Health-Related Quality of Life in People With Parkinson's Disease.

**Citation:** Rehabilitation nursing : the official journal of the Association of Rehabilitation Nurses; ; vol. 44 (no. 3); p. 161-170

**Author(s):** Lee, JuHee; Choi, MoonKi; Yoo, Yonju; Ahn, Sangwoo; Jeon, Justin Y; Kim, Ji Young; Byun, Ji Yong

**Purpose:** The purpose of this study was to test the effects of group exercise and telephone counseling on physical and psychosocial health in people with Parkinson's disease (PD).

**Design:** This was a quasiexperimental study with a nonequivalent control group.

**Methods:** This study took place in Seoul, South Korea. Twenty-two and 20 subjects participated in the intervention and comparison groups, respectively. The intervention group performed group exercises twice a week and received motivational telephone counseling every 2 weeks for 12 weeks.

**Findings:** Significant effects of the intervention were found in overall health-related quality of life (HRQOL; p = .012) and in the following HRQOL dimensions: stigma (p = .026), social function (p = .003), cognition (p = .028), and communication (p = .014). No other variables such as activities of daily living, functional fitness, and depression exhibited statistically significant effects.

**Conclusion/Clinical Relevance:** These results indicate that group exercise with telephone counseling positively affects some aspects of HRQOL in PD patients.

Title: Telephone-Delivered Cognitive Behavioural Therapy for Treating Symptoms of Anxiety and Depression in Parkinson's Disease: A Pilot Trial.

**Citation:** Clinical Gerontologist; Jul 2019; vol. 42 (no. 4); p. 444-453 **Author(s):** Wuthrich, Viviana M.; Rapee, Ronald M.

**Objectives:** To determine the feasibility, acceptability and initial efficacy of telephonedelivered cognitive behavioral therapy (CBT) for the treatment of anxiety and depressive symptoms in people with Parkinson's disease.

**Methods:** A small randomized controlled trial compared telephone-based CBT to waitlist control. Eleven participants aged >50 years with Parkinson's disease and anxiety and/or depressive symptoms above recommended clinical cut-offs, were randomized to one of two conditions. Participants completed self-report measures of symptom severity and quality of life. Their carers were invited to participate and completed self-reported measures of symptoms and carer burden. At the end of the 10-week intervention period, participants and carers were reassessed on baseline measures, and again one month later. Results: The CBT program was associated with significantly reduced depressive symptoms (Cohen's d = .90) at post-treatment with gains maintained at one-month follow-up. Anxiety symptom decreases (Cohen's d = 0.36) were not statistically different. Waitlist was associated with significantly worsened anxiety. Carer symptoms also reduced with CBT. No changes on quality of life were found. Good acceptability and feedback was received.

**Conclusions:** Telephone-based CBT reduced symptoms of depression in participants with Parkinson's disease but not anxiety. Clinical Implications: Telephone-based CBT is a promising treatment option.

**Sources Used:** The following databases are searched on a regular basis in the development of this bulletin: Amed, British Nursing Index, Cinahl, Medline

**Disclaimer:** The results of your literature search are based on the request that you made, and consist of a list of references, some with abstracts. Royal United Hospital Bath Healthcare Library will endeavour to use the best, most appropriate and most recent sources available to it, but accepts no liability for the information retrieved, which is subject to the content and accuracy of databases, and the limitations of the search process. The library assumes no liability for the interpretation or application of these results, which are not intended to provide advice or recommendations on patient care.