

2022-08-12

# Outcome and mortality of hospital admission with COVID-19 for individuals with parkinsonian syndromes

Sorrell, L

<https://pearl.plymouth.ac.uk/handle/10026.1/21966>

---

10.1136/jnnp-2022-abn2.154

---

*All content in PEARL is protected by copyright law. Author manuscripts are made available in accordance with publisher policies. Please cite only the published version using the details provided on the item record or document. In the absence of an open licence (e.g. Creative Commons), permissions for further reuse of content should be sought from the publisher or author.*

### 110 OUTCOME AND MORTALITY OF HOSPITAL ADMISSION WITH COVID-19 FOR INDIVIDUALS WITH PARKINSONIAN SYNDROMES

<sup>1</sup>Lexy Sorrell, <sup>1</sup>Angela King, <sup>1,2</sup>Jemma Inches, <sup>3</sup>Jane Rideout, <sup>3</sup>Robert Sneyd, <sup>4</sup>Christopher Kobylecki, <sup>3</sup>Ray Chaudhuri, <sup>6</sup>Richard Walker, <sup>7</sup>Hannah Martin, <sup>1,2</sup>Camille Carroll\*. <sup>1</sup>University of Plymouth; <sup>2</sup>University Hospitals Plymouth; <sup>3</sup>Expert by Experience; <sup>4</sup>University of Manchester; <sup>5</sup>KCL; <sup>6</sup>North Tyneside General Hospital; <sup>7</sup>University Hospitals Coventry and Warwickshire

10.1136/jnnp-2022-abn2.154

**Objective** To evaluate features of Parkinson's disease (PD) and atypical Parkinson's syndromes (APS) associated with poor outcome and mortality in people with COVID-19 in a hospital setting.

**Background** Previous studies have demonstrated increased mortality of COVID-19 in people with PD. However, it is not known whether this is associated with disease-related factors (eg autonomic dysfunction, dysphagia).

**Methods** An online survey tool captured anonymised patient data from hospital admission records of people with PD and APS who tested positive for COVID-19 between February 2020 and July 2021. We will use Cox proportional hazards and linear regression models to evaluate which characteristics are associated with mortality, increased care requirement and more severe COVID-19 infection. Models will be adjusted for known associations with poor outcome, such as co-morbidities, age and sex.

**Results** Data were collected from 556 admissions from 21 UK sites: 66.2% male; median (IQR) age 80 (11) years; median disease duration 5 (7) years. 19.2% were asymptomatic, 28.8% had mild symptoms and 52.5% required respiratory support. 38.3% died within 4 weeks of a positive COVID-19 test. Preliminary Kaplan-Meier curves suggest that co-existing dementia, marked motor fluctuations and more advanced Hoehn and Yahr stage may be associated with 28-day mortality. Full statistical analysis is in progress.

**Conclusions** Identification of Parkinson's features associated with poor in-hospital COVID-19 outcome will allow a more informed discussion relating to individual COVID-19 risk.

### 111 FACTORS THAT AFFECT CARE NEEDS IN PEOPLE WITH PARKINSON'S DISEASE: A PATIENT PERSPECTIVE

<sup>1</sup>Sarah Fearn, <sup>1</sup>Clara Mencio Viana, <sup>1,2</sup>Sandra Bartolomeu-Pires, <sup>1,2</sup>Christopher Kipps\*. <sup>1</sup>University of Southampton; <sup>2</sup>University Hospital Southampton

10.1136/jnnp-2022-abn2.155

**Background** The care that people with Parkinson's (PwP) require varies over the course of the disease. A patient perspective on the factors determining care needs over time has been lacking.

**Aim** 1) To identify the relative importance of factors that affect care needs of PwP from a patient perspective. 2) To identify whether the relative importance of different factors varies by demographic and clinical characteristics.

**Method:** 392 PwP completed a 5-point Likert scale to score the importance of 6 different factors that affect care needs. Means scores were obtained and factors were compared by participant age, gender, living alone, disease progression, and presence of co-morbidities.

**Results** From a patient perspective, mobility was the most important factor for assessing care needs, followed by

dexterity, eating and drinking, communication, cognitive function, and mental health. This ranking was constant across demographic and clinical characteristics. However, younger patients, females, those living alone, more progressed patients, and those with co-morbidities tended to produce higher mean scores of importance suggesting a larger impact at an individual level.

**Conclusion** This study determined which factors patients consider to most affect the care they require, enabling healthcare professionals to provide more personalised care to PwP.

### 112 PARKINSON'S DISEASE AND SOCIODEMOGRAPHIC FACTORS: A REVIEW

<sup>1</sup>Kit Wu\*, <sup>2</sup>Micha Vidot, <sup>3</sup>James W Mitchell, <sup>4</sup>Arani Nitkunan, <sup>5</sup>Georgina Carr. <sup>1</sup>King's College Hospital; <sup>2</sup>St George's University of London; <sup>3</sup>University of Liverpool; <sup>4</sup>St George's University Hospital NHS Foundation Trust and Croydon University Hospital; <sup>5</sup>Neurological Alliance

10.1136/jnnp-2022-abn2.156

**Background** Unwarranted variation in treatment, care and support for people with Parkinson's Disease (PD) is well documented. To improve equity of service, in line with the NHS Long Term Plan, it is imperative that we understand how sociodemographic factors affect management and care of PD.

**Aim** To review published literature between sociodemographic factors and clinical factors, diagnosis, treatment and outcomes for people with PD.

**Method** We conducted a focused review of published literature between 2000-2021 to outline the evidence describing the relationship between the ten protected characteristics of the Equality Act 2010 and clinical factors, treatment and outcomes in PD. Other factors such as deprivation, settlement status, education and employment were also explored.

**Results** There is an abundance of published literature on age, disability, sex and gender over the twenty-year period. Studies on race and education and employment yielded mixed results. Evidence is lacking for gender reassignment, marriage and civil partnership, pregnancy and maternity, religion and belief, sexual orientation, deprivation, geographical variation (within UK), immigration and settlement.

**Discussion** PD impacts on many facets of life. This review has identified many gaps in knowledge of the effect of sociodemographic factors affecting PD. More research is needed to better provide a more equitable service to patients.

### 113 ASSESSING PREDICTORS OF NEDA IN RRMS PATIENTS INITIATING DIMETHYL FUMARATE IN A REAL-WORLD SETTING

<sup>1</sup>Sarmad Al-Araji\*, <sup>1</sup>Alessia Bianchi, <sup>1</sup>Arman Eshaghi, <sup>1</sup>Le Zhang, <sup>2,3</sup>Baris Kanber, <sup>2,4</sup>Ashwani Jha, <sup>1,3</sup>Olivia Goodkin, <sup>1,2,3,5</sup>Frederik Barkhof, <sup>2,4</sup>Parashkev Nachev, <sup>1,2</sup>Olga Ciccarelli. <sup>1</sup>Queen Square MS Centre, Department of Neuroinflammation, UCL Institute of Neurology; <sup>2</sup>NIHR UCLH Biomedical Research Centre, UCL Queen Square Institute of Neurology; <sup>3</sup>Centre for Medical Image Computing, Department of Medical Physics and Biomedical Engineering, UCL; <sup>4</sup>High-Dimensional Neurology Group, Department of Brain Repair and Rehabilitation, UCL; <sup>5</sup>Department of Radiology and Nuclear Medicine, VU University Medical Centre, Amsterdam, The Netherlands

10.1136/jnnp-2022-abn2.157

**Introduction** No evidence of disease activity (NEDA) is a treatment goal when using disease modifying therapy for