Hospitalisation and comorbidities in Parkinson's disease: A large Australian retrospect study

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1.0 CHAPTER 1 – INTRODUCTION TO MASTERS PROJECT

Project Title:

Hospitalisation and comorbidities in Parkinson’s disease: a large Australian retrospective study.

1.1 Summary

Parkinson’s disease (PD) is a progressive and disabling neurological disorder that affects approximately 1% of the adult population aged over 65 years in Australia. Parkinson’s disease, as with many other chronic illnesses, results in frequent patient hospitalisations. There is a paucity of information on the causes and related co-morbidities that lead to hospitalisation among these patients in an Australian setting. The aim of this study was to examine patterns of hospitalisation of Parkinson’s disease patients with regards to demographic factors, co-morbidities and aspects relating to clinical management. In this study, data was extracted from the NSW Ministry of Health’s Admitted Patient Data Collection (APDC), to examine patterns of patient admission over a five-year period. A comparison group (patients without Parkinson’s disease) was used to strengthen the study and to compare the epidemiological, demographic and clinical features of Parkinson’s disease patients with those of patients without Parkinson’s disease. Statistical analysis of patterns of disease that may predispose Parkinson’s disease patients to hospitalisation was undertaken. The results of this retrospective study were used to inform patient groups and health care providers about possibilities for improved health outcomes for patients and their carers and were published in the Journal of Neurology, Neurosurgery and Psychiatry in 2014.

The first chapter of this Thesis introduces the research project, explaining the nature of the study with a brief description of the overall project. It further provides an overview of the remaining chapters and the layout of the research dissertation. The second chapter of this research dissertation provides an overview of the project’s background, inclusive of an introduction to the study. It introduces the pathophysiology to Parkinson’s disease, as well as evaluating its epidemiology in Australia, in addition to assessing different approaches to management. Learning experiences, challenges and major accomplishments are discussed in
Chapter 3. The results of the project are presented in Chapter 4 in the form in which they were published in the JNNP. A detailed overview of the study’s methodology and statistical analysis is provided in Chapter 5. A critical appraisal and discussion of the study’s significant findings as well as aspects of the design and analysis are discussed in Chapter 6. Chapter 7 comprises a conclusion section and a discussion on the knowledge and insights that I have acquired as a maturing researcher. It also includes a section on future directions and the evolution of my research interests.

Lastly, a detailed appendix section is included. This includes information regarding ethics approval documents. A copy of the cover letter to the Journal of Neurology, Neurosurgery and Psychiatry (JNNP) editor is also provided. Finally, a short reflection of this project’s recent poster presentation at the Movement Disorder Society Australia (MDSA) Congress of Parkinson’s Disease and Movement Disorders – 2014 – Queenstown (New Zealand), as well as its publication in Neurology Update is also included for reference.