Parkinson`s disease in Malawi: A preliminary report from Queen Elizabeth Central Hospital (QECH) adult neurology outpatient clinic

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Introduction

Background

- Parkinson`s disease (PD) is a neurodegenerative disorder that affects over 10 million people globally
- PD presents with motor and non-motor symptoms
- PD prevalence increases by 10-fold between the ages of 50 and 80
- Malawians aged ≥ 60 will make up 8.9 % of the population by 2050
- PD prevalence is expected to increase in the country
- It is important to understand the dynamics of PD in Malawi

Study objective

- To analyze the clinical and socio-demographic characteristics of people with PD (PwP) attending the adult neurology outpatient clinic at QECH

Methods

Study

- A single-site collective case study employing quantitative research methods

Data collections tools

- Customized questionnaire
- Movement Disorder Society Unified Parkinson`s Disease Rating Scale (MDS-UPDRS)

Inclusion criteria

- Clinical PD diagnosis
  - **TRAP: T**remor at rest. **R**igidity, **A**kinesia, **P**ostural changes
- Levodopa prescription
- On follow-up visit

Results

Women were significantly younger at PD onset and study recruitment

Figure 1: Age at PD onset

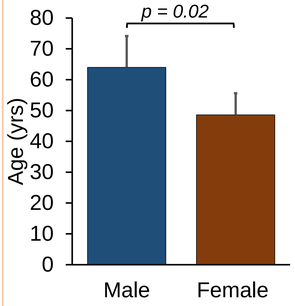
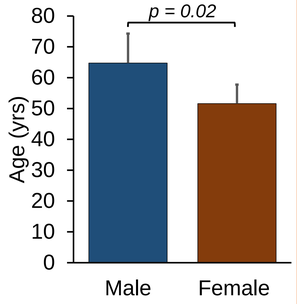


Figure 2: Age at recruitment



- Overall mean age at PD onset: 54.3 ± 10.1
- Overall mean age at study recruitment: 57.4 ± 10.1

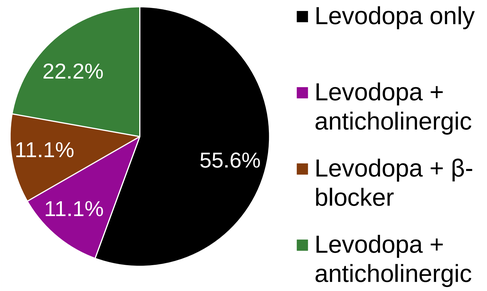
Only women had early-onset PD

Table 1: PD onset

Age at onset (yrs)	All	Male	Female
N	9	4	5
Early onset (< 50)	3 (33.3 %)	0 (0 %)	3 (60 %)
Late onset (≥ 50)	6 (77.8 %)	4 (100 %)	2 (40 %)

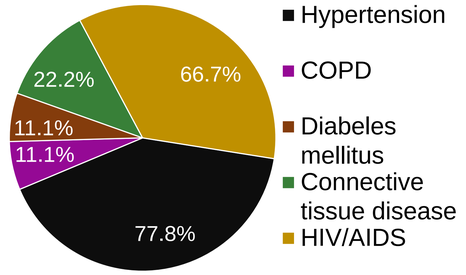
Levodopa was supplemented with anticholinergics and β-blockers

Figure 3: PD drug therapy



Hypertension and HIV/AIDS were frequent comorbidities

Figure 4: Comorbidity burden



- HIV/AIDS increased the Charlson Comorbidity Index

Majority of participants had severe PD which impacted quality of life

Table 2: PD severity classification based on the MDS-UPDRS

PD severity	Part I: Non-motor experiences of daily living	Part II: Motor experiences of daily living	Part 3: Motor examination	Part IV: Motor complications
Mild	33.3 %	44.4 %	0 %	88.9 %
Moderate	44.4 %	44.4 %	33.3 %	11.1 %
Severe	11.1 %	11.1 %	66.7 %	0 %

- All PwP had motor disability ranging from unilateral with unimpaired balance to severe with impaired balance (modified Hoehn and Yahr Scale)

Conclusions

- Majority of PwP had severe motor and comorbidity burden.
- Females were disproportionately affected by early-onset PD

References

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5. www.parkinsons.org

Acknowledgements

- Our lived-experience experts: people with Parkinson`s disease

International Parkinson and Movement Disorder Society
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Queen Elizabeth Central Hospital