

Antiparkinson Medication In Ageing Population: Trends And Challenges

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ABSTRACT

Parkinson's disease (PD) is a progressive neurodegenerative disorder that predominantly affects the elderly, causing motor and non-motor symptoms that diminish quality of life. A prospective observational study in a tertiary care hospital examined prescription patterns, medication adherence, and challenges in managing PD among patients aged 60 and above. The study involved 50 participants, 68% of whom were male, with the highest representation (40%) in the 66–70 age group. Common comorbidities included hypertension (82%) and diabetes mellitus (76%). Levodopa-Carbidopa emerged as the most prescribed therapy (73%), followed by dopamine agonists (38%) and MAO-B inhibitors (22%). Polypharmacy was noted in 42% of cases, reflecting the complexity of treatment regimens in older adults. Non-motor symptoms such as cognitive impairment (54%), autonomic dysfunction (46%), and depression (38%) were prevalent, significantly impacting patient well-being. Medication adherence levels varied: 42% of patients demonstrated high adherence, 38% moderate, and 20% low adherence, primarily due to forgetfulness, regimen complexity, and financial issues. These findings underscore the need for a comprehensive, multidisciplinary approach in PD management for older people. Strategies such as patient education, caregiver support, and digital health technologies may enhance medication adherence and treatment outcomes.

Furthermore, integrating non-pharmacological therapies and addressing socio-economic barriers are essential for holistic care. Future directions should focus on implementing personalized treatment plans, leveraging digital tools for real-time monitoring, and developing financial aid programs to reduce the burden of disease management. Overall, optimizing care for geriatric PD patients requires coordinated efforts to address the disorder's clinical and psychosocial aspects, ultimately improving their functional independence and quality of life.

Keywords: *Parkinson's disease, Dopamine agonists, Substantia nigra, Medication Adherence, Levodopa, Autonomic dysfunction, Non-motor symptoms, Polypharmacy, Motor symptoms, Carbidopa*

1. INTRODUCTION

Parkinson's disease (PD) is a progressive neurodegenerative disorder that mostly affects the ageing population, leading to significant impairments in motor function, cognitive abilities, and overall quality of life [1]. It is the second most common neurodegenerative disease after Alzheimer's, with its prevalence increasing sharply with age. The disorder is characterized by symptoms such as tremors, bradykinesia, muscle rigidity, and postural instability, which are caused by the degeneration of dopaminergic neurons in the substantia nigra. While PD is often associated with motor dysfunction, non-motor symptoms such as cognitive decline, depression, sleep disturbances, and autonomic dysfunction can further complicate disease management [2, 3,4].

The exact etiology of Parkinson's disease remains unclear, but it is believed to arise from a complex interplay between genetic and environmental factors. Advanced age is the most significant risk factor, followed by genetic predisposition, exposure to neurotoxic substances, and head trauma [5]. Despite extensive research, there is no definitive cure for PD, and treatment strategies primarily focus on symptom management through pharmacological, surgical, and rehabilitative interventions. Among these, antiparkinsonian medications, particularly levodopa, dopamine agonists, and MAO-B inhibitors, are crucial in managing symptoms and improving patient outcomes [6, 7].

However, patients with PD face numerous challenges in managing their condition. One of the primary difficulties is medication adherence, as the complex dosing schedules and cognitive impairment associated with PD can lead to missed doses, reducing treatment efficacy. Additionally, long-term medication use can result in complications such as motor fluctuations, dyskinesia, nausea, and orthostatic hypotension, which significantly impact daily activities [8, 9].

Patients also have trouble with mobility, and doing routine tasks such as dressing, eating, and personal hygiene is increasingly challenging. Furthermore, speech and swallowing difficulties arise as the disease progresses, increasing the risk of aspiration pneumonia and malnutrition. Addressing these challenges is crucial for improving disease management and enhancing the well-being of individuals with PD [10,11]. This study analyzes the prescribing patterns, adherence, and challenges associated with antiparkinsonian medications among geriatric patients. Given the complexities of disease progression and treatment response, understanding these trends is essential for optimizing therapeutic strategies and enhancing the quality of life for elderly individuals with PD. This research seeks to contribute valuable insights into improving disease management and patient care in ageing populations by evaluating medication usage, adherence patterns, and associated non-motor symptoms.

2. STUDY METHODOLOGY

This study adopts a prospective observational approach to examine the prescription patterns, adherence, and challenges associated with antiparkinsonian medications in elderly patients aged 60 and above. The research focuses on evaluating trends in medication use, their impact on patient outcomes, and the influence of non-motor symptoms on disease progression. The methodology involves multiple stages, including patient selection, data collection, assessment tools, and statistical analysis to ensure comprehensive evaluation.

Study Design and Setting

A prospective observational study was conducted in a hospital setting, specifically targeting elderly patients diagnosed with Parkinson's disease. The study was conducted at a tertiary care hospital, where patients were recruited based on predefined inclusion and exclusion criteria. The research adhered to ethical standards and obtained necessary approvals from the institutional ethics committee before patient enrollment. The study was conducted over a defined period to ensure adequate data collection and comprehensive analysis. Patient Selection Criteria: The study participants were selected using inclusion and exclusion criteria to maintain the validity and reliability of findings.

Inclusion Criteria:

Patients aged 60 years and above diagnosed with Parkinson's disease.

Individuals are prescribed antiparkinsonian medications for symptom management.

Patients who voluntarily agreed to participate in the study.

Those who had complete medical records available for analysis.

Exclusion Criteria:

Patients with secondary parkinsonism or other neurological disorders.

Individuals with severe cognitive impairment.

Patients with incomplete medical records and those unwilling to participate.

Individuals are undergoing experimental treatments outside standard PD protocols.

Data Collection Procedure

The study employed a structured data collection form to gather patient demographics, clinical history, medication details, and adherence levels. The process began with obtaining informed consent from patients or their caregivers, ensuring ethical compliance. Upon consent, patient details, including age, gender, medical history, comorbidities, and prescribed medications, were documented. Additionally, a medication adherence chart and a non-motor symptom questionnaire were used to assess patients' adherence levels and the impact of non-motor symptoms on daily life. Data was collected from medical records, patient interviews, and follow-up consultations to ensure accuracy and completeness.

Assessment Tools and Questionnaires

To ensure a systematic evaluation, the study incorporated standardized assessment tools:

Medication Adherence Chart: Used to record the frequency of missed doses, reasons for non-adherence, and patterns of medication intake.

Non-Motor Symptom Questionnaire (NMSQ): A validated tool to assess the severity and frequency of symptoms such as cognitive impairment, depression, sleep disturbances, and autonomic dysfunction.

The combination of these tools allowed for a comprehensive evaluation of PD's motor and non-motor aspects, providing deeper insights into the challenges associated with medication use.

Medication Analysis and Prescription Patterns

A detailed prescription analysis was conducted to identify trends in antiparkinsonian medication use. The study examined:

Most prescribed medications (e.g., Levodopa, Dopamine Agonists, MAO-B inhibitors, COMT inhibitors).

Dosage forms (tablets, patches, injections) and frequency of administration.

Polypharmacy concerns are particularly relevant in patients with multiple comorbidities.

Changes in prescription patterns over time, based on disease progression.

This evaluation provided insights into prescribing behaviors and the role of combination therapies in symptom management.

Adherence Evaluation and Challenges

Medication adherence was assessed through self-reported questionnaires and patient interviews. Key factors influencing adherence included:

Forgetfulness (most common in patients aged 66-70).

Complex medication regimens lead to confusion.

Side effects are causing reluctance to continue therapy.

Financial constraints are impacting access to medication.

Cognitive reduces self-management abilities.

The study also explored the role of caregiver involvement in ensuring adherence, highlighting the importance of patient education and support systems.

Ethical Considerations

The study followed ethical guidelines to protect patient rights and confidentiality.

Key ethical aspects included:

Informed consent: Ensuring voluntary participation with the right to withdraw at any stage.

Patient confidentiality: All personal data was anonymized to maintain privacy.

Approval from the Ethics Committee: The study protocol was reviewed and approved before implementation.

No conflict of interest: Researchers maintained neutrality in data collection and analysis.

By adhering to these ethical principles, the study ensured scientific integrity and patient safety throughout the research process.

3. RESULTS

This study examined the prescription patterns, medication adherence, and challenges associated with antiparkinsonian drugs in elderly patients. The findings provide crucial insights into how Parkinson's disease (PD) is managed in ageing populations, highlighting demographic trends, treatment effectiveness, and factors influencing adherence.

Patient Demographics

A total of 50 patients participated in the study, with a male-to-female ratio of approximately 68% males and 32% females. The majority of the patients belonged to the 66-70 age group, indicating that Parkinson's disease predominantly affects individuals in the late geriatric phase. Most participants were outpatients (58%), while 42% were inpatients, admitted primarily for conditions unrelated to PD but requiring management of Parkinsonian symptoms during hospitalization. This distribution suggests that PD is commonly managed in outpatient settings, but hospital admissions often arise due to comorbidities or disease complications.

Comorbidities Among Patients

The presence of comorbid conditions significantly influenced the management of PD. The two most frequently observed comorbidities were hypertension (82%) and diabetes mellitus (76%), indicating that cardiovascular and metabolic disorders are common among elderly PD patients.

Other comorbidities included:

Dyslipidemia (34%)

Chronic kidney disease (22%)

Osteoarthritis (18%)

Cognitive decline or dementia (16%)

These findings highlight the need for integrated treatment approaches, as managing PD alongside other chronic conditions presents challenges related to polypharmacy and adverse drug interactions.

Medication Prescription Patterns

A thorough analysis of prescribed antiparkinsonian drugs revealed that Levodopa-Carbidopa (Syndopa Plus) was the most frequently prescribed medication, administered to 73% of the patients. Other commonly used drugs included:

Dopamine agonists (38%), primarily Pramipexole.

MAO-B inhibitors (22%), such as Rasagiline.

COMT inhibitors (18%), mainly Entacapone

Polypharmacy was observed in a significant number of patients, with 42% receiving two or more antiparkinsonian medications to manage symptoms effectively. The combination of levodopa with a dopamine agonist was a prevalent strategy to prolong symptom relief and delay motor complications. Polypharmacy was observed in a significant number of patients, with 42% receiving two or more antiparkinsonian medications to manage symptoms effectively. The combination of levodopa with a dopamine agonist was a prevalent strategy to prolong symptom relief and delay motor complications.

During hospital stays, prescription patterns showed adjustments in drug regimens. The most frequently altered medication was levodopa, with modifications in dosage, timing and frequency to optimize its effects and minimize fluctuations in mobility.

Impact of Non-Motor Symptoms on Quality of Life

The assessment of non-motor symptoms (NMS) using the standardized Non-Motor Symptoms Scale (NMSS) revealed that cognitive decline, autonomic dysfunction, and sleep disturbances were PD patients' most prevalent non-motor issues.

The most commonly reported symptoms included:

Cognitive impairment and memory decline (54%)

Autonomic dysfunction, such as excessive sweating, constipation, and urinary incontinence (46%)

Depression and anxiety (38%)

Sleep disturbances, including REM sleep behavior disorder and insomnia (36%)

Graphical analysis using pie charts and bar graphs indicated that cognitive symptoms and autonomic dysfunction had the most significant impact on patients' quality of life. These symptoms often led to poor medication adherence and required additional interventions such as cognitive therapy or psychiatric support.

Electrolyte Imbalances in PD Patients

The study also explored the correlation between electrolyte imbalances and PD progression. Scatter plots of serum sodium, potassium, and calcium levels showed that:

Hyponatremia (low sodium levels) was prevalent in 42% of patients, particularly those on long-term Levodopa therapy.

Hypokalemia (low potassium) was observed in 36% of patients, often linked to diuretic use for hypertension management in Parkinson's patients.

Hypercalcemia (elevated calcium levels) was noted in 24% of participants, which may contribute to neurological disturbances in PD.

These findings suggest that electrolyte imbalances are a significant concern in elderly PD patients, requiring regular monitoring and dietary modifications to prevent complications.

Medication Adherence Patterns

A critical component of this study was the evaluation of medication adherence and its influencing factors. Adherence levels were categorized as high (consistent intake), moderate (occasional skips), and low (frequent skips).

42% of patients exhibited high adherence, taking medications as prescribed.

38% showed moderate adherence, skipping doses occasionally due to forgetfulness.

20% had low adherence, missing medications frequently due to cognitive decline, financial constraints, or side effects.

Among the patients with low adherence, the most affected age group was 66-70 years, where forgetfulness was the primary reason for missed doses. Patients with cognitive impairment and those experiencing severe non-motor symptoms had the highest rates of non-adherence, indicating that disease complexity directly impacts medication compliance.

Reasons for non-adherence

A detailed analysis of reasons for medication non-adherence revealed:

Forgetfulness (50%) – More common among patients with mild cognitive decline.

Complex medication regimens (28%) – Patients struggled with multiple daily doses.

Side effects (18%) – Some stopped taking medications due to nausea, dizziness, or hallucinations.

Financial constraints (12%) – High costs of medication led to skipped doses.

These findings emphasize the importance of caregiver involvement, medication reminders, and financial assistance programs to enhance adherence rates.

Graphical Representation of Data

The study used various graphical tools to illustrate medication use and adherence trends.

Pie charts depicted the distribution of prescribed medications, showing that levodopa was the primary treatment.

Graphs represented the frequency of non-motor symptoms, highlighting cognitive decline and autonomic dysfunction as significant concerns.

Scatter plots illustrated electrolyte fluctuations across different age groups, establishing a connection between ageing, PD progression, and metabolic disturbances.

These visual representations enhanced data interpretation, providing a clearer picture of medication trends and patient challenges in PD management.

Hospital vs. Outpatient Medication Trends

A comparison of medication usage in hospital settings versus outpatient treatment indicated notable differences:

Hospitalized patients received more frequent dosage adjustments, particularly in Levodopa administration timing to manage motor fluctuations.

Dopamine agonists and COMT inhibitors were more commonly prescribed to outpatients, suggesting a focus on long-term symptom control outside hospital care.

Electrolyte levels were more closely monitored in inpatients, as fluctuations were more pronounced due to hospitalization stress and comorbid conditions.

4. DISCUSSION

Parkinson's disease (PD) is a chronic neurological condition that predominantly affects the elderly, resulting in various motor and non-motor impairments. This study provides significant insights into prescribing trends, medication adherence, and the challenges of managing PD among older patients. The demographic evaluation highlighted a greater prevalence among males, with most participants aged between 66 and 70. This observation is consistent with earlier studies, which suggest that men may have a higher susceptibility to PD due to hormonal, genetic, and environmental factors. The presence of comorbid conditions like hypertension and diabetes mellitus further complicates treatment, thereby emphasizing the importance of a multidisciplinary approach in the geriatric population [12,13].

According to prescription pattern analysis, Levodopa-Carbidopa (Syndopa Plus) was the most commonly used medication. Dopamine agonists, MAO-B inhibitors, and COMT inhibitors followed this. The preference for levodopa corresponds with international treatment guidelines, as it remains the most potent option for managing PD symptoms. Nonetheless, prolonged Levodopa use is associated with complications such as dyskinesias and motor fluctuations, necessitating the inclusion of

adjunct therapies. The concurrent use of levodopa with dopamine agonists and COMT inhibitors seen in the study demonstrates an intent to improve treatment response and mitigate adverse effects [14,15]. Despite these benefits, the issue of polypharmacy persists, especially among elderly patients with multiple health concerns. Polypharmacy increases the risk of drug interactions, cognitive issues, and reduced compliance. The findings also revealed that inpatients had more frequent medication adjustments than outpatients, who generally maintained consistent treatment regimens [16,17].

The presence of non-motor symptoms significantly reduces the quality of life in PD patients, with cognitive decline being particularly prevalent. Cognitive dysfunction affects memory, decision-making abilities, and adherence to treatment regimens due to broader neurodegenerative changes [18]. Autonomic symptoms such as excessive sweating, urinary incontinence, and constipation further disrupt daily life and increase reliance on caregivers. Depression and anxiety, which impact nearly 38% of patients, are often underdiagnosed despite being linked to neurochemical and structural changes in the brain [19]. Managing Parkinson's is also complicated by medication side effects like dyskinesia, orthostatic hypotension, and motor fluctuations. Adherence is further compromised in patients experiencing cognitive deterioration or economic hardship [20]. Interventions such as cognitive enhancers (e.g., rivastigmine), anticholinergics, and lifestyle modifications can be beneficial. Mood disturbances are often managed with SSRIs, SNRIs, therapy, and changes in routine. An integrated care model that includes medical and non-medical interventions is essential for improving outcomes [21,22].

The study also evaluated electrolyte disturbances in elderly PD patients, identifying a high prevalence of imbalances such as hyponatremia, hypokalemia, and hypercalcemia. Hyponatremia was particularly troubling as it contributed to confusion, impaired cognition, and increased fall risk. This condition was more common in patients on chronic Levodopa therapy, especially those concurrently using diuretics. Hypokalemia, found in over one-third of the participants, raises additional concerns like muscle weakness, cardiac issues, and impaired nerve function [23,24].

Though less frequent, hypercalcemia was still notable

and may result from altered vitamin D metabolism or reduced mobility. These findings underscore the importance of including electrolyte monitoring in routine care. Dietary adjustments, appropriate supplementation, and periodic blood tests can help reduce complications and hospitalizations [25,26]. Medication adherence was another crucial aspect addressed in this research. Approximately 20% of patients showed poor adherence, while 38% demonstrated moderate compliance. The primary reasons for non-adherence were forgetfulness, complex medication schedules, side effects, and financial issues. Patients with cognitive impairments were likelier to miss doses, illustrating the connection between disease severity and treatment compliance [27,28]. Complex regimens requiring multiple daily doses were complicated for many to manage. Adverse effects such as nausea and hallucinations led some to discontinue therapy. Financial difficulties further hindered access to required medications, particularly in those prescribed combination therapies [29]. These challenges highlight the necessity for patient-friendly interventions like simplified dosing plans, caregiver engagement, and technological tools (e.g., pill organizers, reminder apps) [30,31].

Comparative data on medication use in inpatient versus outpatient settings revealed distinct differences. In hospital settings, frequent dose adjustments were made to address fluctuating symptoms, especially with levodopa. Outpatients, on the other hand, followed more stable, long-term medication plans that relied more heavily on dopamine agonists and COMT inhibitors [32]. Adherence was generally lower among outpatients due to a lack of supervision and reliance on self-care. This suggests that while inpatient care allows for optimized drug administration, outpatient management needs stronger adherence support. Incorporating telemedicine services, health-monitoring tools, and localized community programs may improve long-term care [33,34,35].

While the findings of this study are consistent with previously reported challenges in PD treatment, they also identify opportunities for better management. The high incidence of cognitive and autonomic symptoms, along with frequent electrolyte disturbances, suggests that a more comprehensive care model is needed. This includes regular cognitive screening, mental health evaluations, and electrolyte assessments [36,37]. Improving adherence should remain a priority, and can be achieved through educational sessions, financial support for medications, and regular follow-up systems. Clinicians should aim for personalized plans that are both effective and easy to follow, thereby minimizing the negative impact of polypharmacy [35,31,32].

5. CONCLUSION

This study provides significant insights into the management of Parkinson's disease (PD) in elderly patients, emphasizing the complexities associated with medication adherence, prescription patterns, non-motor symptoms, and comorbidities. The findings highlight that PD is more prevalent among males, with the majority of cases occurring in individuals aged 66-70 years. The high prevalence of comorbid conditions such as hypertension and diabetes further complicates disease management, necessitating a multidisciplinary approach to optimize patient outcomes.

Levodopa-Carbidopa remains the cornerstone of PD treatment, prescribed to most patients due to its effectiveness in alleviating motor symptoms. However, adjunct therapies, including dopamine agonists, MAO-B inhibitors, and COMT inhibitors, are frequently used to enhance symptom control and delay the onset of motor complications. Despite the benefits

of combination therapy, polypharmacy poses challenges related to adverse drug interactions, increased side effects, and reduced adherence. Additionally, non-motor symptoms such as cognitive decline, autonomic dysfunction, depression, and sleep disturbances significantly impact the quality of life of PD patients and require integrated treatment approaches.

The study also revealed that medication adherence is a major challenge, with many patients skipping doses due to forgetfulness, complex dosing schedules, financial constraints, and medication side effects. Strategies such as patient education, caregiver support, and digital tools can improve adherence rates and treatment effectiveness. Furthermore, electrolyte imbalances, particularly hyponatremia and hypokalemia, were common among PD patients, indicating the need for regular biochemical monitoring. Future research should focus on longitudinal studies to assess the long-term impact of various treatment strategies on disease progression and patient quality of life. Investigating the role of digital health interventions, such as smart pill dispensers and AI-driven medication reminders, could provide innovative solutions to adherence challenges. Additionally, exploring the genetic and biochemical mechanisms underlying electrolyte imbalances in PD could lead to targeted interventions that improve neurological function and reduce complications. Given the multifaceted nature of PD, a multidisciplinary approach involving neurologists, psychiatrists, Dietitians, and rehabilitation specialists is essential for optimizing patient outcomes. A more effective and patient-centered PD management strategy can be developed by addressing both motor and non-motor symptoms and adherence.

Overall, this study underscores the need for a comprehensive, patient-centered approach that addresses both motor and non-motor symptoms, improves medication adherence, and minimizes treatment-related complications. Future research should focus on long-term strategies to enhance

The quality of life for elderly PD patients through personalized care and advanced therapeutic interventions.

Limitations of the Study

Despite its strengths, the study had certain limitations:

Small sample size (limited generalizability of findings).

Short study duration prevents long-term outcome evaluation.

Exclusion of advanced-stage PD patients limits insight into late-stage medication challenges.

By identifying these limitations, future research should incorporate larger sample sizes, longitudinal studies, and real-time adherence tracking for a more comprehensive understanding.

6. LIMITATIONS

This was a single-center retrospective study, which may not be generalizable to other settings.

Molecular methods for resistance gene detection were not used.

3Clinical outcomes of patients and infection-related mortality were not analyzed.

Viral, fungal, and anaerobic pathogens were not included.

7. DECLARATIONS

Conflicts of interest: There is no any conflict of interest associated with this study

Consent to participate: There is consent to participate.

Consent for publication: There is consent for the publication of this paper.

Authors' contributions: Author equally contributed the work

Table 1: Demographic, Clinical, and Medication History of Patients with Parkinson's Disease

Parameter	Subcategory	61-65	66-70	71-75	76-80	81-85	86-90	Total
Age Distribution (Years)	-	11	15	12	6	5	1	50
Gender	Male	34	-	-	-	-	-	34(68%)
	Female	16	-	-	-	-	-	16(32%)

Medication History	Syndopa Plus 125 mg (Levodopa+Carbidopa)	10	14	10	5	5	1	45
	Syndopa CR 250 mg (Levodopa+Carbidopa)	2	3	0	0	0	0	5
	Syncapeone 325mg (Levodopa+Carbidopa+Entacapone)	2	0	0	1	0	0	3
	Pramipexole 1.05mg (Pramipexole)	5	4	0	0	0	0	9
Comorbidities	Hypertension	10	11	11	4	4	1	41
	Type 2 Diabetes Mellitus	7	11	10	4	5	1	38
	Hypothyroidism	6	2	1	0	0	0	9
	Schizophrenia	3	0	0	0	0	0	3
	Seizures	4	0	0	0	0	1	5
	Coronary Artery Disease (CAD)	1	4	3	2	0	0	10
	Cerebrovascular Accident (CVA)	0	0	2	1	0	0	3
	Acute Kidney Injury (AKI)	1	0	0	0	0	0	1
	Dementia	0	1	0	0	0	0	1
	Chronic Kidney Disease (CKD)	0	0	1	1	0	1	3
	Chronic Obstructive Pulmonary Disease (COPD)	0	0	1	0	1	0	2
	Ulcer	0	0	0	0	1	0	1
	Deep Vein Thrombosis (DVT)	0	0	0	0	2	0	2
	Alzheimer's Disease	0	0	1	0	0	0	1
	Anemia	0	0	1	0	0	0	1
	Gastric Carcinoma	0	1	0	0	0	0	1
Non-Motor Symptoms	Forgetfulness	19	-	-	-	-	-	19
	Loss of Taste/Smell	5	-	-	-	-	-	5

	Urgency to Pass Urine	8	-	-	-	-	-	8
	Difficulty Sleeping	10	-	-	-	-	-	10
	Night-time Urination	14	-	-	-	-	-	14
	Excessive Sweating	15	-	-	-	-	-	15
Hospital Medications	Syndopa (Levodopa+Carbidopa)	37	-	-	-	-	-	37
	Syncapone (Levodopa+Carbidopa+Entacapone)	4	-	-	-	-	-	4
	Pramipexole (Pramipexole)	6	-	-	-	-	-	6
	Pramirol (Ropinirole)	12	-	-	-	-	-	12
Medication Adherence	No Skips	2	2	2	0	3	0	9
	1-3 Skips	1	5	3	2	0	0	11
	3-5 Skips	3	3	1	3	1	1	12
	6-10 Skips	0	4	3	1	1	0	9
	>10 Skips	2	1	2	0	0	0	5

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