

N311 Care Plan # 1  
Lakeview College of Nursing  
Shelby Myers

**Demographics (5 points)**

<b>Date of Admission</b> 04-12-2018	<b>Client Initials</b> R. P.	<b>Age</b> 71	<b>Gender</b> Male
<b>Race/Ethnicity</b> Caucasian	<b>Occupation</b> Farmer/ Farm Dealer	<b>Marital Status</b> Separated	<b>Allergies</b> No known allergies
<b>Code Status</b> DNR	<b>Height</b> 74 inches	<b>Weight</b> 150.2 pounds	

**Medical History (5 Points)****Past Medical History:**

- 2017 LM bifurcates mid LAD 70 3x20 Promus DES MID w/ residual 80-90% not improve BPOA diag/CIRC/OM LI DOM-RCA 30% patient PDA stent 30% INST
- Anxiety
- Benign Prostatic Hyperplasia (BPH)
- Coronary Artery Disease (CAD)
- Cellulitis of left third toe
- Chewing tobacco use
- Chronic toe ulcer
- Clostridium Difficile (C. Diff)
- Chronic Obstructive Pulmonary Disease (COPD)
- Depression
- Diabetic ulcer of right
- Diabetic ulcer of left toes
- Diabetes Mellitus type II
- Dysphagia
- Fall risk
- Gastroesophageal reflux disease (GERD)
- Heart attack
- History of total right knee replacement
- Hyperlipidemia
- Hypertriglyceridemia
- Hypokalemia
- Lumbar radiculopathy
- Methicillin-resistant staphylococcus aureus (MRSA)
- Mild anemia
- Mixed action and resting tremor
- Neuropathy
- Parkinsonism

- Peripheral vascular disease (PVD)
- Postop check

**Past Surgical History:**

- Esophagogastroduodenoscopy biopsy (04/24/2020)
- Arthroplasty knee revision (01/31/2020)
- Arthroplasty knee revision (01/24/2020)
- Amputation toe (11/22/2019)
- Amputation toe (09/30/2019)
- Colonoscopy high risk (08/14/2018)
- Spinal fluid tap diagnostic (03/06/2017)
- Appendectomy
- Cardiac catheter
- Cataract
- Knee replacement
- Lumbar discectomy
- Shoulder repair
- Stent placement

**Family History:**

Maternal: Cardiovascular disease; strokes

Sister: Diabetes Mellitus

**Social History (tobacco/alcohol/drugs including frequency, quantity, and duration of use):**

Tobacco: currently uses chewing tobacco and chews about a can per week.

Alcohol: past user of beer for about one to two times a year.

**Admission Assessment****Chief Complaint (2 points):**

The client complains of right knee stiffness on 02/10/2022.

**History of Present Illness – OLD CARTS (10 points):**

The client presented today with complaints of right knee stiffness that began after he had his right total knee replacement done. The pain is located in his right knee and is described as a constant dull, achy stiffness that radiates up the right leg. The client says nothing really aggravates the knee but does alternate heating pads and ibuprofen as needed (PRN) for stiffness and pain. He rated his pain as a four on a numeric scale of one to ten.

### **Primary Diagnosis**

**Primary Diagnosis on Admission (3 points):** Parkinson's Disease

**Secondary Diagnosis (if applicable):** N/A

**Pathophysiology of the Disease, APA format (20 points):**

The act of muscle movement within itself takes many moving parts and pieces working together to get the signal from one place to another, and then eventually to the body part you want to move. In this process, a signal starts in the cerebral cortex of the brain where the signal then travels to the basal ganglia. The basal ganglia of the brain is a complex system of neurons that communicate within each other to help translate signals and create a direct message out of them. The basal ganglia have several parts to it, but the ones that specifically relate to Parkinson's disease are the striatum, globus pallidus, substantia nigra, and the subthalamic nucleus. With normal movement, the substantia nigra pars compacta (which houses the dopaminergic neurons) creates dopamine that attaches to D1 and D2 receptors that excite and inhibit the GABAergic neurons in the globus pallidus and the substantia nigra and create a continuous rhythm that helps to transfer the signals from the cortex to the skeletal muscles.

Taking a deeper look into the process of signaling controlled movement, it all starts with dopamine. The dopaminergic neuron is located in the substantia nigra. This neuron is in charge

of regularly releasing dopamine that attached to the dopamine 1 and 2 receptors that are located inside the striatum. The dopamine 1 receptors are excitatory, while the dopamine 2 receptors are inhibitory. Depending on which receptor the dopamine attaches to, it has that effect on the closest GABAergic neuron. So, if a dopamine attaches to a D1 receptor in the striatum, it stimulates the GABAergic neuron in the striatum that leads to the globus pallidus. If the dopamine attaches to a D2 receptor, it will inhibit the GABAergic neuron that leads to the globus pallidus. There are two GABAergic neurons in the striatum one leads to the globus pallidus interna, and one to the globus pallidus externa. There is another GABAergic neuron in the globus pallidus interna that leads directly to the thalamus, while the neuron in the globus pallidus externa connects with a neuron in the subthalamic nucleus (Kouli, Tournsey, Kuan, 2018).

Following the path of a dopamine may help one understand the difference between “normal” brain function and the brain function of someone with Parkinson’s disease. The dopamine is created in the substantia nigra by the dopaminergic neuron. The dopamine collects in the striatum, which is also the storage for D1 and D2 receptors. On one side of the cycle, a dopamine will attach to a D1 receptor that will stimulate the first GABAergic neuron that leads to the globus pallidus interna. Once that neuron is stimulated, the next neuron (located in the globus pallidus interna) will have the opposite effect and become inhibited by the actions of the previous neuron. This second neuron will lead to the thalamus where it will again have the opposite effect and allow the thalamus to send signals to the motor cortex and then down the spinal cord and to the skeletal muscles for movement. On the other side of the cycle, the dopamine attaches to the D2 receptor which inhibits the GABAergic neuron that leads to the globus pallidus externa. This neuron will create another opposite effect (stimulation) on the next GABAergic neuron in the externa space. The neuron in the externa space will cause the

subthalamic nucleus to inhibit the globus pallidus interna from the other side. Overall, the cycle is a repetitive and rhythmic process of stimulating and inhibiting signals to reach the final point of the thalamus that sends the signal to the motor cortex, down the spinal cord, and to the skeletal muscle (Kouli, Tournsey, Kuan, 2018).

In a client with Parkinson's disease, the dopamine levels are extremely decreased and in turn effect the pattern of the cycle which causes the motor issues you see with Parkinson's clients. While we don't know what exactly causes the death of dopamine, the main four theories are a-synuclein aggregation, abnormal protein clearance, mitochondrial dysfunction, and neuroinflammation (Kouli, Tournsey, Kuan, 2018). The lack of dopamine can be one or a combination of these theories, but nevertheless the disease occurs because of a disconnect in the cycle of movement, specifically dealing with the dopaminergic neuron in the substantia nigra that causes an overactive GABAergic neuron with excessive inhibitory input to the thalamus. This causes the brain to not be able to communicate with the muscles as efficiently as someone with a normal amount of dopamine. The overexertion of the thalamus is what causes the muscles to tremor and have continuous movement. The signs and symptoms of Parkinson's are usually the four cardinal features of tremors, rigidity, bradykinesia, and postural instability. Some other signs and symptoms include hypomimia, dysphagia, hypophonia, blurred vision, eyelid opening apraxia, shuffling, festination, and freezing of gait (Kouli, Tournsey, Kuan, 2018).

There is no diagnostic test to precisely diagnose Parkinson's, but the U.S. Food and Drug Administration approved a scan called DaTscan that allows the doctors to see detailed pictures of the dopamine producing system in the brain (Johns Hopkins Medicine, 2022). Otherwise, in order to diagnose Parkinson's a doctor must exam the client and their history to see if the symptoms match the criteria of the disease. So, for my client, I assume he was having symptoms

and along with his farming background and the doctor made the diagnosis from that information. Pesticides have been proven to be linked in cases of people who are diagnosed with Parkinson's and as a farmer my client surely came across lots of pesticides often.

The treatment of Parkinson's varies from case to case because it cannot be cured at this point in medicine, but the symptoms can be controlled with certain medicines. The treatment plan for my client is to continuously follow up with a neurologist and he is also taking Rytary, Primidone, and Sinemet. The client takes Rytary to help with the tremors and the stiffness that the disease can cause. Primidone is taken to prevent any seizures and supplement in helping reduce the tremor. And lastly Sinemet is used to help treat muscle stiffness, tremors, spasms, and the poor muscle control that comes along with the diagnosis of Parkinsonism.

#### **Pathophysiology References (2) (APA):**

*How Parkinson's disease is diagnosed.* Johns Hopkins Medicine. (2022). Retrieved February 17, 2022, from <https://www.hopkinsmedicine.org/health/treatment-tests-and-therapies/how-parkinson-disease-is-diagnosed>

Kouli A, Torsney KM, Kuan WL. Parkinson's Disease: Etiology, Neuropathology, and Pathogenesis. In: Stoker TB, Greenland JC, editors. *Parkinson's Disease: Pathogenesis and Clinical Aspects* [Internet]. Brisbane (AU): Codon Publications; 2018 Dec 21. Chapter 1. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK536722/> doi: 10.15586/codonpublications.parkinsonsdisease.2018.ch1

#### **Laboratory Data (20 points)**

**\*If laboratory data is unavailable, values will be assigned by the clinical instructor\***

**CBC Highlight All Abnormal Labs**—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab	Normal Range	Admission Value	Today's Value	Reason for Abnormal Value
RBC				
Hgb				
Hct				
Platelets				
WBC				
Neutrophils				
Lymphocytes				
Monocytes				
Eosinophils				
Bands				

**Chemistry Highlight All Abnormal Labs**—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab	Normal Range	Admission Value	Today's Value	Reason For Abnormal
Na-				
K+				
Cl-				
CO2				
Glucose				
BUN				
Creatinine				
Albumin				

<b>Calcium</b>				
<b>Mag</b>				
<b>Phosphate</b>				
<b>Bilirubin</b>				
<b>Alk Phos</b>				

Urinalysis **Highlight All Abnormal Labs**—Explanations must be in complete sentences and contain in-text citations in APA format.

<b>Lab Test</b>	<b>Normal Range</b>	<b>Value on Admission</b>	<b>Today's Value</b>	<b>Reason for Abnormal</b>
<b>Color &amp; Clarity</b>				
<b>pH</b>				
<b>Specific Gravity</b>				
<b>Glucose</b>				
<b>Protein</b>				
<b>Ketones</b>				
<b>WBC</b>				
<b>RBC</b>				
<b>Leukoesterase</b>				

Cultures **Highlight All Abnormal Labs**—Explanations must be in complete sentences and contain in-text citations in APA format.

<b>Test</b>	<b>Normal</b>	<b>Value on</b>	<b>Today's</b>	<b>Explanation of Findings</b>
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	<b>Range</b>	<b>Admission</b>	<b>Value</b>	
<b>Urine Culture</b>				
<b>Blood Culture</b>				
<b>Sputum Culture</b>				
<b>Stool Culture</b>				

**Lab Correlations Reference (1) (APA):**

**Diagnostic Imaging**

**All Other Diagnostic Tests (10 points):**

**Diagnostic Imaging Reference (1) (APA):**

**Current Medications (10 points, 2 points per completed med)  
 \*5 different medications must be completed\***

**Medications (5 required)**

<b>Brand/Generic</b>					
<b>Dose</b>					
<b>Frequency</b>					
<b>Route</b>					
<b>Classification</b>					
<b>Mechanism of Action</b>					
<b>Reason Client Taking</b>					
<b>Contraindications (2)</b>					
<b>Side Effects/Adverse Reactions (2)</b>					

**Medications Reference (1) (APA):**

**Assessment**

**Physical Exam (18 points) – HIGHLIGHT ALL PERTINENT ABNORMAL FINDINGS**

<p><b>GENERAL:</b>  <b>Alertness:</b>  <b>Orientation:</b>  <b>Distress:</b>  <b>Overall appearance:</b></p>	
<p><b>INTEGUMENTARY:</b>  <b>Skin color:</b>  <b>Character:</b>  <b>Temperature:</b>  <b>Turgor:</b>  <b>Rashes:</b>  <b>Bruises:</b>  <b>Wounds:</b>  <b>Braden Score:</b>  <b>Drains present: Y <input type="checkbox"/> N <input type="checkbox"/></b>  <b>Type:</b></p>	
<p><b>HEENT:</b>  <b>Head/Neck:</b>  <b>Ears:</b>  <b>Eyes:</b>  <b>Nose:</b>  <b>Teeth:</b></p>	
<p><b>CARDIOVASCULAR:</b>  <b>Heart sounds:</b>  <b>S1, S2, S3, S4, murmur etc.</b>  <b>Cardiac rhythm (if applicable):</b>  <b>Peripheral Pulses:</b>  <b>Capillary refill:</b>  <b>Neck Vein Distention: Y <input type="checkbox"/> N <input type="checkbox"/></b>  <b>Edema Y <input type="checkbox"/> N <input type="checkbox"/></b>  <b>Location of Edema:</b></p>	
<p><b>RESPIRATORY:</b>  <b>Accessory muscle use: Y <input type="checkbox"/> N <input type="checkbox"/></b>  <b>Breath Sounds: Location, character</b></p>	
<p><b>GASTROINTESTINAL:</b>  <b>Diet at home:</b>  <b>Current Diet</b>  <b>Height:</b>  <b>Weight:</b>  <b>Auscultation Bowel sounds:</b>  <b>Last BM:</b></p>	

<p><b>Palpation: Pain, Mass etc.:</b>  <b>Inspection:</b>  <b>Distention:</b>  <b>Incisions:</b>  <b>Scars:</b>  <b>Drains:</b>  <b>Wounds:</b>  <b>Ostomy:</b> Y <input type="checkbox"/> N <input type="checkbox"/>  <b>Nasogastric:</b> Y <input type="checkbox"/> N <input type="checkbox"/>  <b>Size:</b>  <b>Feeding tubes/PEG tube</b> Y <input type="checkbox"/> N <input type="checkbox"/>  <b>Type:</b></p>	
<p><b>GENITOURINARY:</b>  <b>Color:</b>  <b>Character:</b>  <b>Quantity of urine:</b>  <b>Pain with urination:</b> Y <input type="checkbox"/> N <input type="checkbox"/>  <b>Dialysis:</b> Y <input type="checkbox"/> N <input type="checkbox"/>  <b>Inspection of genitals:</b>  <b>Catheter:</b> Y <input type="checkbox"/> N <input type="checkbox"/>  <b>Type:</b>  <b>Size:</b></p>	
<p><b>MUSCULOSKELETAL:</b>  <b>Neurovascular status:</b>  <b>ROM:</b>  <b>Supportive devices:</b>  <b>Strength:</b>  <b>ADL Assistance:</b> Y <input type="checkbox"/> N <input type="checkbox"/>  <b>Fall Risk:</b> Y <input type="checkbox"/> N <input type="checkbox"/>  <b>Fall Score:</b>  <b>Activity/Mobility Status:</b>  <b>Independent (up ad lib)</b> <input type="checkbox"/>  <b>Needs assistance with equipment</b> <input type="checkbox"/>  <b>Needs support to stand and walk</b> <input type="checkbox"/></p>	
<p><b>NEUROLOGICAL:</b>  <b>MAEW:</b> Y <input type="checkbox"/> N <input type="checkbox"/>  <b>PERLA:</b> Y <input type="checkbox"/> N <input type="checkbox"/>  <b>Strength Equal:</b> Y <input type="checkbox"/> N <input type="checkbox"/> if no -  <b>Legs</b> <input type="checkbox"/> <b>Arms</b> <input type="checkbox"/> <b>Both</b> <input type="checkbox"/>  <b>Orientation:</b>  <b>Mental Status:</b>  <b>Speech:</b>  <b>Sensory:</b>  <b>LOC:</b></p>	

<p><b>PSYCHOSOCIAL/CULTURAL:</b>  <b>Coping method(s):</b>  <b>Developmental level:</b>  <b>Religion &amp; what it means to pt.:</b>  <b>Personal/Family Data (Think about home environment, family structure, and available family support):</b></p>	
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**Vital Signs, 1 set (5 points) – HIGHLIGHT ALL ABNORMAL VITAL SIGNS**

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
10:14	76	130/52	18	35.7 C	93%

**Pain Assessment, 1 set (5 points)**

Time	Scale	Location	Severity	Characteristics	Interventions
10:06	Numeric Scale	Right knee	4	Stiff, achy, dull	Heating pad and pain medicine

**Intake and Output (2 points)**

Intake (in mL)	Output (in mL)

**Nursing Diagnosis (15 points)**

**\*Must be NANDA approved nursing diagnosis\***

Nursing Diagnosis	Rationale	Interventions (2 per dx)	Outcome Goal (1 per dx)	Evaluation
<ul style="list-style-type: none"> <li>Include full nursing diagnosis with “related to” and “as</li> </ul>	<ul style="list-style-type: none"> <li>Explain why the nursing diagnosis was chosen</li> </ul>			<ul style="list-style-type: none"> <li>How did the client/family respond to the nurse’s actions?                             <ul style="list-style-type: none"> <li>Client</li> </ul> </li> </ul>

<p>evidenced by” components</p> <ul style="list-style-type: none"> <li>Listed in order by priority – highest priority to lowest priority pertinent to this client</li> </ul>				<p>response, status of goals and outcomes, modifications to plan.</p>
<p><b>1.</b> Self-care deficit as evidenced by dirty fingernails and ungroomed hair related to muscle rigidity and tremors from diagnosis or Parkinson's</p>	<p>This nursing diagnosis was chosen because if the client cannot take care of himself then he can easily develop sores, rashes, infections, and other harmful factors that can affect the quality of his health</p>	<p><b>1.</b> Create a hygiene routine based on the client’s preferences and practices when they were more independent</p> <p><b>2.</b> Encourage client to alert the nurse when they want to clean up or do daily hygiene tasks such as teeth brushing or bathing</p>	<p><b>1.</b> The client will indirectly participate in their self-care which will not only impact their physical health, but their mental and emotional health as well</p>	<ul style="list-style-type: none"> <li>The client understands the extent of their capabilities and communicates what they need</li> <li>The client chews tobacco, so dental hygiene is not a priority at the moment</li> <li>Goals partially met</li> </ul>
<p><b>2.</b> Impaired physical mobility related to disease process of Parkinson’s as evidenced by rigidity and inability to bear weight</p>	<p>This nursing diagnosis was chosen because overtime the client has become less and less mobile and is at increased risk for contractures and permanent stiffness</p>	<p><b>1.</b> Implement daily ROM exercises for the client to help prevent further impairment</p> <p><b>2.</b> Encourage client to actively participate in physical therapy programs to help prevent</p>	<p><b>1.</b> The client will be able to perform some activities of daily living with assistance as needed inside the scope of the disease.</p>	<ul style="list-style-type: none"> <li>The client does participate in physical activity within the scope of their ability.</li> <li>The client understands the need for assistance with exercise and activities of daily living.</li> <li>Goals met.</li> </ul>

		further weakening		
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**Other References (APA):**

**Concept Map (20 Points):**

### Subjective Data

“My knee has been stiff ever since I got it replaced.”

“It is stiff as a board.”

“The stiffness is at a 4.”

### Nursing Diagnosis/Outcomes

### Objective Data

### Client Information

### Nursing Interventions

1. Create a hygiene routine based on the client's preferences and practices when they were more independent. The client is a 74 year old male with a history of stent placement, anxiety, BPH, Blood pressure was 130 over 52.
2. Encourage client to take time for self-care they want to clean up or do daily hygiene tasks such as teeth brushing or bathing. Respiration were 18 breaths per minute, glucose, depression, diabetic ulcer of rt foot, diabetic ulcer of left toe, diabetes
1. Implement daily ROM exercises for the client to help prevent further impairment attack, history of total rt knee replacement, type 2, dyslipidemia, risk of MI/heart disease.
2. Encourage program and development of physical therapy program to help with further weakening mixed action and resting tremor, myofascial pain, neuropathy, parkinsonism, and 74 inches tall. Client is 74 inches tall. Parkinsonism on 04-12-2018.





