

Polypharmacy Project

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N322 Introduction to Pharmacology

Lakeview College of Nursing

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PLEASE INSERT YOUR CLIENT SCENARIO HERE – THIS WILL BE PAGE TWO OF THE DOCUMENT

Patient: 84 year old female

She lives at home on her own, and has weekly visits from her daughter who lives 35 miles away. She also receives daily support from a care worker to help with activities of daily living.

Medical hx: hypertension and rheumatoid arthritis

Wt 120 pounds Ht 5ft 2in

Allergies: ASA, Latex, Shellfish

<p>Drug #1</p> <p>Drug Class: Antihypertensive; Beta-Blocker, Nonselective; Diuretic, Thiazide</p>	<p>Drug Name (Generic): Bendroflumethiazide</p> <p>Drug Name (Trade): Corzide</p>
<p>How is the medication taken: (include dose, route, and frequency)</p>	<p>This medication is taken orally. This medication is taken daily. The prescribed dose for this patient is 2.5 mg.</p>
<p>Specific Directions not included above:</p>	<p>You should take this medication in the morning and you can take it with or without food.</p>
<p>Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)</p>	<p>Yes-</p> <p><u>Lisinopril</u> which is prescribed for 10 mg daily. The patient takes this medication orally. According to Lexicomp (2019), “Thiazide and Thiazide-Like Diuretics may enhance the hypotensive effect of Angiotensin-Converting Enzyme Inhibitors. Thiazide and Thiazide-Like Diuretics may enhance the nephrotoxic effect of Angiotensin-Converting Enzyme Inhibitors.” (p. 11) It also states that you can give the medications together but you need to monitor affects and watch closely for interactions.</p> <p><u>Calcium with vitamin D</u> reacts with Bendroflumethiazide. This prescribed dose is 1200 mg BID. The patient takes this medication orally. According to Lexicomp (2019), “Thiazide and Thiazide-Like Diuretics may decrease the excretion of Calcium Salts. Continued concomitant use can also result in metabolic alkalosis.” (p.3) It also states that if you choose to continue</p>

	<p>taking these medication together you need to monitor that patient very closely for toxic effects of calcium.</p> <p><u>Methotrexate</u> reacts with Bendroflumethiazide. This is prescribed dose is 20 mg once weekly on Wednesday. This patient takes this medication orally. These two medications taken together for a prolonged time could cause antineoplastic-induced bone marrow suppression.</p> <p><u>Xanax</u> reacts with Bendroflumethiazide. This is prescribed dose is 1 mg BID as needed. Xanax can cause hypotensive effects and can cause someone to reach dangerously low blood pressure levels when combined with another hypertensive medication.</p> <p><u>Zolpidem</u> reacts with Bendroflumethiazide. This is prescribed dose is 10 mg at bedtime for sleep. This medication can have hypotensive effects. When added to a hypertensive medication it can cause dangerously low blood pressures.</p>
<p>Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)</p>	<p>Do not use alcohol or drugs that slow your actions. Do not take OTC drugs that have the ability to raise your blood pressure. Avoid all allergens especially severe ones while on this medication. While on this medication epinephrine could be ineffective in treating allergic reactions. Talk with your doctor about other options. This patient is allergic to shellfish, latex and ASAs. Shellfish especially could start these severe allergic reactions and a plan needs to be made for emergent situations.</p>
<p>Does any of the client's past medical history</p>	<p>No contraindications</p>

contradict the use of this medication?	
What is the indication for use of this medication based on the client's past medical history? (If unable to determine an indication based on past medical history, please list potential indications for use of the medication in general)	This patient has diagnosed hypertension. This medication is used to treat her hypertension and keep her at appropriate blood pressure levels.
What would you teach the client about taking this medication?	I would teach the client why they are taking this medication first. I would teach them the side effects and adverse effects of the medication and what to watch out for. I would teach them to monitor their blood pressure levels. I would teach them what appropriate blood pressure is. I would teach them the importance of hydration while on this medication. I would tell them that this medication could cause increased urination and to replace their fluids. I would teach them the importance of this medication and what untreated hypertension can do to the body. I would lastly teach them the importance of medication compliance.
How much would medication cost per month if paying out of pocket?	A 5mg tablet will cost \$4.66. This patient only needs 2.5 mg per dose. For an entire month this medication would cost \$69.90.

<p>Drug #2</p> <p>Drug Class: Angiotensin-Converting Enzyme (ACE) Inhibitor; Antihypertensive</p>	<p>Drug Name (Generic): Lisinopril</p> <p>Drug Name (Trade): Prinivil</p>
<p>How is the medication taken: (include dose, route, and frequency)</p>	<p>This medication is taken orally. You have it once daily usually in the morning. The dose that is prescribed for this patient is 10mg.</p>
<p>Specific Directions not included above:</p>	<p>Can be taken with or without food. It needs to be taken at the same time every day. Drink lots of non-caffeinated liquid and stay hydrated. If a dose is missed take it as soon as possible. If it is too close to time for the next dose do not double up medications. Skip the dose and take next one as scheduled.</p>
<p>Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)</p>	<p>Yes-</p> <p><u>Bendroflumethiazide</u> which is prescribed for 2.5 mg daily. The patient takes this medication orally. According to Lexicomp (2019), “Thiazide and Thiazide-Like Diuretics may enhance the hypotensive effect of Angiotensin-Converting Enzyme Inhibitors. Thiazide and Thiazide-</p>

	<p>Like Diuretics may enhance the nephrotoxic effect of Angiotensin-Converting Enzyme Inhibitors.” (p. 11) It also states that you can give the medications together but you need to monitor affects and watch closely for interactions.</p> <p><u>Trimethoprim</u> which is prescribed for 200mg daily for 3 days for a UTI. It was prescribed on her recent ED visit. According to Lexicomp (2019) the trimethoprim, “May enhance the hyperkalemic effect of the Angiotensin-Converting Enzyme Inhibitors.” (p.11) It also states you can give the medication but you need to closely monitor therapy for interactions.</p> <p><u>Methotrexate</u> which is prescribed for 20 mg once a week on Wednesday. When these two medications are taken concurrently it can induce hepatotoxicity and potentially risk liver injury.</p> <p><u>Xanax</u> is prescribed as 1 mg BID as needed. When these medications are taken concurrently there is a risk they could cause severe hypotension.</p> <p><u>Zolpidem</u> is prescribed 10 mg at bedtime. Both these medications have hypotensive effects. When these medications are taken concurrently there is a risk they could cause severe hypotension.</p>
<p>Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)</p>	<p>Patient needs to avoid drinking until they know how this drug affects them. Also consult your doctor prior to drinking.</p>
<p>Does any of the client’s past medical history</p>	<p>Yes-</p>

contradict the use of this medication?	She is 84 years old and this medication can have increased side effects for people above the age of 65. She needs to be monitored for increased side effects.
What is the indication for use of this medication based on the client's past medical history? (If unable to determine an indication based on past medical history, please list potential indications for use of the medication in general)	The indication of use for this medication is Hypertension. This patient is diagnosed with hypertension.
What would you teach the client about taking this medication?	I would teach this client about the dangers of hypertension. I would then teach her the importance of this medication and medication compliance. I would teach her the signs and symptoms of an allergic reaction. I would also teach her the side effects of this medication and make her aware of what could potentially happen. I would instruct her not to drink while on this medication until affects are known. I would teach her the dangers of fluid lose while on this medication and instruct her to be cautious and stay hydrated. I would instruct her to talk to her primary doctor if she needs to take any OTC medications that have the potential to raise her blood pressure. I would lastly teach her about the signs and symptoms of infection and instruct her to call her doctor if she does have any of these signs.
How much would medication cost per month if paying out of pocket?	According to Lexicomp (2019) this medication can cost anywhere from \$0.06-\$1.24 for 10mg. Since she takes that every day it could be anywhere from \$1.80- \$37.20.

Drug #3	Drug Name (Generic): Simvastatin
Drug Class: Antilipemic Agent, HMG-CoA Reductase Inhibitor	Drug Name (Trade): Zocor
How is the medication taken: (include dose, route, and frequency)	This medication is taken orally. This medication is taken at night. The prescribed dose for this medication is 40mg.

Specific Directions not included above:	Take this medication either at bedtime or with your evening meal.
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	<u>Methotrexate</u> reacts with simvastatin. Methotrexate is prescribed at 20 mg once weekly on Wednesday. When taken together these agents are known to cause hepatotoxicity or potentially cause severe liver injury.
Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)	Patient cannot drink while on this medication. She needs to avoid grapefruits and grapefruit juice. She need to follow her specialized diet and exercise regimen that the doctor has given her.
Does any of the client's past medical history contradict the use of this medication?	Yes- She is 84 years old and this medication is intended for people under the age 65. She will just need to be closely monitored while on this medication.
What is the indication for use of this medication based on the client's past medical history? (If unable to determine an indication based on past medical history, please list potential indications for use of the medication in general)	This medication is used to treat hyperlipidemias. This patient does not have this issue so she could potentially be taking it to prevent a cardiovascular event. She is at higher risk because of her hypertension so it could be used as a precautionary medication.
What would you teach the client about taking this medication?	I would teach the patient why she is taking this medication. I would teach her the side effects and adverse reactions. I would teach her the signs and symptoms of an allergic reaction. I would instruct her that she needs to have her blood drawn periodically while on this medication. I would also teach her to follow her diet and exercise plan and the importance of

	it. I would teach her the effects alcohol can have on this medication. Lastly I would teach her the importance of medicine compliance.
How much would medication cost per month if paying out of pocket?	According to Lexicomp (2019), this medication can cost anywhere from \$0.05- \$4.92 for the prescribed 40mg. For an entire month this would cost the patient anywhere from \$1.50-\$147.60.

Drug #4	Drug Name (Generic): Methotrexate
Drug Class: Antineoplastic Agent, Antimetabolite (Antifolate); Antirheumatic, Disease Modifying; Immunosuppressant Agent	Drug Name (Trade): Otrexup
How is the medication taken: (include dose, route, and frequency)	This medication is taken weekly. It is taken once orally every Wednesday. The prescribed dose for this medication is 20mg.
Specific Directions not included above:	Drink plenty of non-caffeinated fluids while taking this medication.
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	Yes- <u>Trimethoprim</u> is contraindicated for this medication. The dose is 200 mg. The patient is taking this medication twice daily for 3 days. She is taking for a UTI. She was prescribed this medication on her recent ED visit. According to Lexicomp (2019), "Trimethoprim may enhance the adverse/toxic effect of Methotrexate." (p.3) It also states you should avoid using

	<p>these medications together because it has major risk factors.</p> <p><u>Lisinopril</u> is contraindicated for this medication. Lisinopril is prescribed at 10 mg daily. When these two medications are taken concurrently it can induce hepatotoxicity and potentially risk liver injury.</p> <p><u>Bendroflumethiazide</u> is contraindicated with Methotrexate. This is prescribed dose is 2.5 mg daily. This patient takes this medication orally. These two medications taken together for a prolonged time could cause antineoplastic-induced bone marrow suppression.</p> <p><u>Paracetamol</u> is contraindicated with this medication. It is prescribed at 1g four times daily when needed. At higher doses or prolonged treatment this medication combination can cause hepatotoxicity or severe liver injury.</p> <p><u>Simvastatin</u> reacts with Methotrexate. Simvastatin is prescribed at 40 mg at night. When taken together these agents are known to cause hepatotoxicity or potentially cause severe liver injury.</p>
<p>Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)</p>	<p>Avoid drinking while on this medication.</p>
<p>Does any of the client’s past medical history contradict the use of this medication?</p>	<p>No contraindications</p>

What is the indication for use of this medication based on the clients past medical history? (If unable to determine an indication based on past medical history, please list potential indications for use of the medication in general)	The indication for use is rheumatoid arthritis. My patient is diagnosed with rheumatoid arthritis.
What would you teach the client about taking this medication?	I would teach this client what she is using this medication for. I would also teach her the side effects and adverse effects of this medication. I would teach her that she is at an increased risk for infection on this medication and the signs to look for. I would teach her the importance of washing her hands and keeping good hygiene. I would also teach her that she could bleed easily and she needs to be cautious of that. She also needs to learn that she needs to be cautious in the sunlight and avoid UV rays if possible. She needs to protect herself from them and limit her time in it. I would teach her the importance of fluid replacement and hydration. I would lastly teach her the importance of medication compliance.
How much would medication cost per month if paying out of pocket?	According to Lexicomp (2019) this medication can cost anywhere from \$3.56- \$6.24 for 2.5 mg. So for one dose (20mg) it would cost her anywhere from \$28.48-\$49.92. For an entire month that would cost her anywhere from \$113.92-\$199.68.

Drug #5	Drug Name (Generic): Folic Acid
Drug Class: Vitamin	Drug Name (Trade): Folvite
How is the medication taken: (include dose, route, and frequency)	This medication is taken daily except on Wednesdays. The dose is 5mg. you take this medication orally.
Specific Directions not included above:	None.
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	No interactions.
Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)	None.
Does any of the client's past medical history contradict the use of this medication?	None.
What is the indication for use of this medication based on the client's past medical history? (If unable to determine an indication based on past medical history, please list potential indications for use of the medication in general)	This patient is taking folic acid because her prescription of methotrexate diminishes it. Folic acid is given in order to normalize her levels and keep her rheumatoid arthritis treated.
What would you teach the client about taking this medication?	I would teach the client the importance of medication compliance and the medication regimen. I would teach her the signs and symptoms of low folic acid levels and high folic acid levels. I would teach the client why she is taking the medication. I would teach the client

	to report any adverse effects that she experiences.
How much would medication cost per month if paying out of pocket?	According to GoodRx this medication would cost the patient about \$45.77 a month. (2019).

Drug #6	Drug Name (Generic): Acetaminophen
Drug Class: antipyretic, non-opioid analgesic	Drug Name (Trade): Paracetamol
How is the medication taken: (include dose, route, and frequency)	This medication is taken four times daily as needed. The patient can take the medication every 6 hours if needed. The patient should take this medication orally. The dose taken should be 1g per dose.
Specific Directions not included above:	You should not exceed 4g in a day for risk of toxicity.
Does this medication interact with any other	Yes-

medication(s) on this list? (see rubric for further instruction)	<u>Methotrexate</u> interacts with this medication. Methotrexate is prescribed at 20 mg once a week on Wednesday. When these medications are combined for a prolonged period of time or at higher doses, they can cause hepatotoxicity or severe liver injury.
Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)	The patient should avoid alcohol consumption while taking this medication. It can cause CNS depression.
Does any of the client's past medical history contradict the use of this medication?	No.
What is the indication for use of this medication based on the client's past medical history? (If unable to determine an indication based on past medical history, please list potential indications for use of the medication in general)	This patient is taking this medication to reduce the pain her rheumatoid arthritis causes. This medication can reduce her pain in her joints.
What would you teach the client about taking this medication?	I would teach this client what she is using this medication for. I would also teach her the side effects and adverse effects of this medication. I would teach her that this medication is an Anti-inflammatory medication. I would teach her the importance of medication compliance and the importance of reporting any adverse effects that she encounters. I would educate her to get routine liver and renal function test done. I would teach her the signs and symptoms of liver or renal malfunction. I would teach her the importance of only taking the prescribed dose.

How much would medication cost per month if paying out of pocket?	The average price for this medication in a 1000 count bottle is \$25.00 for 500mg pills. This means every pill would be about \$0.03 apiece. If the patient is doubling this medication 4 times a day she will use about 240 pills a month. This means she would spend about \$5.95 a month on this medication.
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Drug #7	Drug Name (Generic): Trimethoprim
Drug Class: Antibiotic	Drug Name (Trade): Primsol
How is the medication taken: (include dose, route, and frequency)	This medication is taken twice daily for 3 days. The dose is 200mg. you take this medication orally.
Specific Directions not included above:	Take entire prescription. Do not take these medications for a different infection.
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	Yes- <u>Lisinopril</u> reacts with this medication. The dose is 10 mg daily. These medications taken concurrently can cause hyperkalemia because they both are potassium sparing medications. <u>Methotrexate</u> is contraindicated for this medication. The dose is 20 mg weekly on Wednesday. These medications taken concurrently can cause myelosuppression and megaloblastic anemia. This can be fatal.
Lifestyle interactions:	Do not drink alcohol when taking this medication. It can cause CNS excitability.

(Daily tobacco use, alcohol, drugs, etc.)	
Does any of the client's past medical history contradict the use of this medication?	No.
What is the indication for use of this medication based on the client's past medical history? (If unable to determine an indication based on past medical history, please list potential indications for use of the medication in general)	The patient had a recent UTI diagnosed and this medication is treating the infection.
What would you teach the client about taking this medication?	I would teach this client what she is using this medication for. I would also teach her the side effects and adverse effects of this medication. I would teach her that this medication is an antibiotic for her infection. I would teach her the importance of medication compliance and the importance of reporting any adverse effects that she encounters. I would educate about the importance of finishing all antibiotics and antibiotic resistance. I would teach her the importance of only taking the prescribed dose and finishing the entire prescription.
How much would medication cost per month if paying out of pocket?	According to GoodRx this medication is priced at \$9.54 averagely for her dose and regimen.

Drug #8	Drug Name (Generic): Calcium with Vitamin D
Drug Class: Vitamin/ Supplement	Drug Name (Trade): Caltrate 600 + D
How is the medication taken: (include dose, route, and frequency)	This medication is taken twice a day. The dose is 1200 mg. you take this medication orally.
Specific Directions not included above:	Take this medication with food or with a drink.
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	Yes- <u>Bendroflumethiazide</u> reacts with this medication. It is prescribed at 2.5 mg daily. When these medications are given concurrently, they can cause hypercalcemia. Bendroflumethiazide inhibit renal excretion of calcium. Calcium supplements add more calcium to their diets. That leads to an excess of calcium. They can also cause metabolic alkalosis with prolonged therapy.
Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)	Take with food. Avoid spinach, rhubarb, whole grain and bran foods. They will decrease the absorption of calcium.
Does any of the client's past medical history contradict the use of this medication?	No.
What is the indication for use of this medication based on the client's past medical history? (If unable to determine an indication based on past medical history, please list potential indications for use of the medication in general)	This client is 84 years old. At 84 years old people can experience a decrease in calcium levels. The patient is taking this medication to ensure her calcium levels are adequate and keep her in good health.

What would you teach the client about taking this medication?	I would teach this client what she is using this medication for. I would also teach her the side effects and adverse effects of this medication. I would teach her that this medication is used to increase her calcium levels. I would teach her the importance of medication compliance and the importance of reporting any adverse effects that she encounters. I would educate her to get routine blood work done to check her calcium levels. I would teach her the signs and symptoms calcium deposits and hypercalcemia. It would also be good for her to know the signs and symptoms of hypocalcemia. I would teach her the importance of only taking the prescribed dose.
How much would medication cost per month if paying out of pocket?	A bottle of 120 pills at Walmart costs about \$11.47. (2020). Per pill the medication costs about \$0.10. They are 600 mg tablets. She will have to take 2 of these in order to reach her dose at 1200 mg. She will take approximately 120 pills a month. She would spend about \$11.47 a month on this medication.

Drug #9	Drug Name (Generic): Alprazolam
Drug Class: Antianxiety	Drug Name (Trade): Xanax
How is the medication taken: (include dose, route, and frequency)	This medication is taken 1 mg twice a day as needed. You take this medication orally.
Specific Directions not included above:	You cannot take this medication with alcohol.
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	<p>Yes-</p> <p><u>Bendroflumethiazide</u> interacts with this medication. It is prescribed at 2.5 mg daily. Bendroflumethiazide can cause hypotensive effects and can cause someone to reach dangerously low blood pressure levels when combined with Xanax which also has hypotensive effects.</p> <p><u>Lisinopril</u> interacts with this medication. It is prescribed at 10 mg daily. Lisinopril has</p>

	<p>hypotensive effects and so does Xanax. When combined they can cause dangerously low blood pressure levels.</p> <p><u>Zolpidem</u> interacts with this medication. It is prescribed at 10 mg at bedtime. Both of these medications have sedation effects and together they can cause dangerous levels. They can cause respiratory depression and CNS depression.</p>
<p>Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)</p>	<p>Patient cannot drink alcohol.</p>
<p>Does any of the client's past medical history contradict the use of this medication?</p>	<p>No.</p>
<p>What is the indication for use of this medication based on the client's past medical history? (If unable to determine an indication based on past medical history, please list potential indications for use of the medication in general)</p>	<p>The client does not have any past medical history that pertains to this medication, but she could be taking it for general anxiety. She could have anxiety and takes this medication in order to bring her anxiety level down. Anxiety does not have to be a diagnosed illness in order to have medication prescribed for it.</p>
<p>What would you teach the client about taking this medication?</p>	<p>I would teach the client the appropriate medication dose and importance of the medication regimen. I would teach her signs and symptoms of anxiety. I would teach her about the effects the medication can have on her and discourage activities such as driving until the effects are known. I would tell the patient not to abruptly stop taking this medication and to always talk to her doctor first. This medication needs to be tapered down before stopping. I</p>

	will teach the patient to always alert medical personnel if she experiences any respiratory depression or profound sedation.
How much would medication cost per month if paying out of pocket?	According to GoodRx the average monthly price for this medication would be \$29.30. (2019)

Drug #10	Drug Name (Generic): Zolpidem
Drug Class: Antianxiety/ Sedative	Drug Name (Trade): Ambien
How is the medication taken: (include dose, route, and frequency)	This medication is taken once a day at bedtime. The dose is 10mg. You take this medication orally.
Specific Directions not included above:	Take on an empty stomach as you are laying down for bed. This medication has a quick onset.
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	<p>Yes-</p> <p><u>Xanax</u> interacts with this medication. It is prescribed at 1 mg BID as needed. Both of these medications have sedation effects and together they can cause dangerous levels. They can cause respiratory depression and CNS depression.</p> <p><u>Bendroflumethiazide</u> interacts with this medication. It is prescribed at 2.5 mg daily. Both of these medications have hypotensive effects. When combined they can cause dangerously low blood pressure levels.</p> <p><u>Lisinopril</u> interacts with this medication. It is prescribed at 10 mg daily. Both of these medications have hypotensive effects. When combined they can cause dangerously low blood pressure levels.</p>
Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)	Do not eat with this medication.

Does any of the client's past medical history contradict the use of this medication?	No.
What is the indication for use of this medication based on the client's past medical history? (If unable to determine an indication based on past medical history, please list potential indications for use of the medication in general)	<p>The patient does not have any medical history that pertains to this, but she could be taking it for insomnia. The patient does not have to be diagnosed with anything to have medication prescribed to help her sleep. The patient could need this in order to get a good nights sleep.</p> <p>As people get older it is harder for them to get a good night's sleep. So, she could have this in order to help that problem because she is 84.</p>
What would you teach the client about taking this medication?	<p>I would teach the client the importance of the medication regimen and dosage. I would teach her the signs and symptoms of overdose of this medication because the max dose for a day is 10mg. it is very easy to overdose on this medication. I would teach her the adverse effects of this medication. I would encourage her to take precautions while she sleeps because patients on this medication can do activities without memory of it. I would instruct her to communicate with her doctors about taking this medication. I would teach her to alert medical personnel if she begins to have serious headaches during the day.</p>
How much would medication cost per month if paying out of pocket?	<p>According to drugs.com, the average price for 100 pills is \$1950.73. (2019). The patient will only need 30 pills a month. So, the average price would be \$585.22 a month for this patient.</p>

Is there anything about this medication regimen scenario that might indicate a potential difficulty in maintaining compliance with the orders as listed?

For Bendroflumethiazide a potential difficulty could be that this medication interacts with a lot of her other medications. The effects of those interactions could potentially make the client abruptly stop taking her medication. For lisinopril a reason the client would not adhere to the medication could be that it also interacts with a lot of medications. It reacts with 5 medications on her

medication list. She could avoid it to avoid interaction reactions. For Simvastatin the client could avoid this medication because it is a nighttime drug. If the patient gets sleepy and does not remember to take her medications before bed it could affect her medication regimen. For Methotrexate the patient could ignore her regimen because it has a very weird schedule. It is only taken on Wednesday every week. Since it is only once a week it could be difficult to remember, or she could think it isn't important since its only once a week. For folic acid the patient could potentially think it isn't important because she doesn't have a direct ailment that she needs it for. Her folic acid is to compensate for what her methotrexate does to her and if she isn't aware of that then she could ignore that medication prescription. For paracetamol the patient could not take this medication because it is a medication she has to take 4 times a day. Sometimes it could be hard for her to remember and adhere to the medication when it is so frequent. She has to work to remember to take the medication 4 times a day. For trimethoprim the patient could not take the medication because she doesn't feel good. This medication is to treat a UTI. In older adults UTIs can cause confusion. If the patient is confused she could refuse her medications or believe she doesn't need them. The Calcium with Vitamin D medication could be put off because it is a very large dose. The dosage is 1200mg and that create a very large pill. If the pill is too big the client could refuse to take it in fear of choking on it. For Xanax the adverse effects could be worse than what the medication is trying to fix. It can cause anger and more anxiety than what it is treating. Some would avoid this just to avoid the possible complication of more anxiety. For zolpidem the adverse effects could potentially make the patient refuse this medication. Some of the adverse effects are serious and can cause very scary things to happen to the patient. If the patient understands the adverse effects and understands that she could be doing things while sleeping and have no recollection she could stop taking it to avoid that.

Is there anything about this medication regimen scenario that might assist the client in maintaining the medication regimen as ordered?

The Bendroflumethiazide is prescribed to treat the patient's high blood pressure and so she would stick to the regimen because it keeps her blood pressure at appropriate levels. The patient would adhere to the prescription of lisinopril because it also helps keep her blood pressure at normal levels. The Simvastatin is used to prevent cardiovascular events that could potentially happen. The patient would adhere to this medication in order to avoid cardiovascular event that could happen in her old age or because of her hypertension. The prescription for methotrexate would be adhered to because it treats the rheumatoid arthritis that the client is diagnosed with. Folic acid would be taken because it is a very cheap medication. This medication will not cost the patient a lot even without insurance and so she wouldn't have a problem buying the medication. For the paracetamol regimen, a reason the client would stick to it would be because it decreases her pain that comes with her rheumatoid arthritis. In order to avoid the pain the client would continue taking this medication. The client would be adhered to trimethoprim because it is fixing something that could be potentially uncomfortable for the patient. It treats the UTI the patient has. So, in order for the patient not to have the symptoms and effects of the UTI she would take the medication. The calcium with vitamin d would be taken to avoid any bone issues the client could have. This medication strengthens bones and so in the event the client falls she is less likely to have serious bone injuries. She also is less likely to have any bone degeneration. The Xanax would be taken routinely because the client would experience a decrease in her anxiety. Anxiety can be debilitating for some. So, it could help the client carry on with daily activities without anxiety. The zolpidem would be

adhered to because it would help her get a good nights sleep. Older adults can struggle to get a restful nights sleep and this medication could allow her to get that.

What suggestions might you make to the prescriber and/or client (or questions you might ask the prescriber) to help this client scenario? (think about decreasing the potential for interaction(s) through medication reduction, other potential medications, diet changes, lifestyle changes, etc)

A question I would ask the prescriber is if the prescriber chose the right antibiotic for this patient. This patient has many medications that react with her trimethoprim prescription. These interactions can be very serious for this patient and could cause her bigger issues. I believe there are different antibiotic options that could be considered that would cause less side effects for this patient. A possible other option could be amoxicillin. I believe also considering a different medication for treating her rheumatoid arthritis would be beneficial. The patient is prescribed methotrexate which interacts with over half of her current medications. I think there are better options that would react less with her other current medications. A possible other option could be Etanercept.

What would the patients monthly out of pocket expense for all 10 medications? (Total Cost for all 10 meds)?

Bendroflumethiazide: \$69.90

Lisinopril: \$37.20

Simvastatin: \$147.60

Methotrexate: \$199.68

Folic Acid: \$45.77

Paracetamol: \$5.95

Trimethoprim: \$9.54

Calcium with Vitamin D: \$11.47

Xanax: \$29.30

Zolpidem: \$585.22

All the medications would cost the patient about \$1141.63 a month for all her medications.

Reflective Statement of Experience:

During this project I have learned that finding a medication regimen that works together 100% is almost impossible. There will always be a little reaction between some medications and you just need to be aware and always monitor your patients closely or tweak regimens. For example, in my project the patient was prescribed methotrexate and folic acid which cannot be taken together. The patient needed both medications and so they prescribed it so that methotrexate was only taken on Wednesdays and the folic acid was

taken every other day. This way the clients needs were met but a serious interaction was avoided. Polypharmacy is important and it is involved in every single patient we will encounter as nurses. We have to be aware and conscious of what our patients are taking so we can be their advocates, educators and great caregivers. As a client I am very thankful my nurses and doctors review this daily so I know I am getting the best care possible.

References (5)

Caltrate 600 d3. (2020). Retrieved April 23, 2020, from [https://www.walmart.com/search/?query=caltrate 600 + d3&typeahead=Caltrate 600 + D](https://www.walmart.com/search/?query=caltrate+600+d3&typeahead=Caltrate+600+D)

Jones, & Bartlett. (2018). *2019 Nurses drug handbook* (18th ed.). Burlington, MA: Jones & Bartlett Learning.

Lexicomp. (n.d.). Retrieved from <https://online.lexi.com/lco/action/home>

Prescription Prices, Coupons & Pharmacy Information. (2019). Retrieved April 23, 2020, from <https://www.goodrx.com/>

Prices, Coupons & Patient Assistance Programs. (2019). Retrieved April 23, 2020, from <https://www.drugs.com/price-guide/>

N322 Polypharmacy Rubric

You will be given a scenario about your client with a list of medications. You will make sure your client is taking medications correctly, educate them on medications, and look for contradictions, costs, over the counter lifestyle factors & compliance with medications.

Please address all rubric items. Please include a reflection of your experience. You may place drugs in each separate paragraph or in a table. You must cite your source for each paragraph or table.

N322 Polypharmacy Grading Rubric

Criteria	Excellent 40 points	Acceptable 31-39 points	Unacceptable 0-30 points	Points Earned
Each drug should have a completed breakdown within the tables provided, which includes the following: <ul style="list-style-type: none"> • Drug class • Generic name • Trade name • How is the medication taken (include dose, route, frequency) 	All key components were addressed within the paper and were accurate.	The student provided the required information for some of the medications, but not all and/or the answers provided were inaccurate. (Each individual component for each medication is worth one point)	The student failed to address a sufficient number of the listed components within the paper and/or the components were addressed but were inaccurate. (Each individual component for each medication is worth one point)	___/40
Criteria	Excellent 10 points	Acceptable 8-10 points	Unacceptable 0 - 7 points	Points Earned
Specific Directions not included above: <ul style="list-style-type: none"> • Is there any type of medication on the patient list 	All key components were addressed within the	The student did list some of the medications that required specific directions, however	Student failed to answer the questions and/or the answers were inaccurate.	___/10

<p>that have specific directions? (before bed, before breakfast, 30 minutes before meals, etc..)</p>	<p>paper.</p>	<p>some of the medications included specific directions that were not addressed and/or were inaccurate. (For each medication this question if worth one point)</p>	<p>(For each medication this question is worth one point)</p>	
<p>Criteria</p>	<p>Excellent 0 points</p>	<p>Acceptable 16-19</p>	<p>Unacceptable 0-15 points</p>	<p>Points Earned</p>
<p>Does this medication have any potentially serious interactions with any other medication(s) on this list, and/or potential interactions that should be closely monitored due to co-administration?</p> <ul style="list-style-type: none"> Do any of the medications interact with each other? <p>(Please note: if there is an interaction between two medication, you MUST list that interaction on BOTH medications to receive full credit. You may utilize the same verbiage/wording on each medication, we want to know you are thinking about it when</p>	<p>All medications reviewed and student explained medication interactions.</p>	<p>The student did list some of the potential interactions of the medication(s), but failed to address all potential interactions that are serious and/or need close monitoring. (for each medication listed this question is worth two points)</p>	<p>Student failed to answer question and/or The student did list some of the potential interactions of the medication(s), but failed to address all potential interactions that are serious and/or need close monitoring. (for each medication listed this question is worth two points)</p>	<p>___/20</p>

considering each medication)				
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Criteria	Excellent 5 points	Acceptable 4 points	Unacceptable 0 -3 points	Points Earned
Lifestyle interactions: <ul style="list-style-type: none"> • What lifestyle factors counteract with the medications? (tobacco user, ETOH use - 3 beers daily)	Student showed knowledge why lifestyle would counteract with medications	The student listed lifestyle interactions for some of the medications, but not all and/or the interactions listed were not priority or were incorrect. (For each medication, this question is worth half a point)	Student failed to answer question or the student listed lifestyle interactions for some of the medications, but not all and/or the interactions listed were not priority or were incorrect. (For each medication, this question is worth half a point)	___/5

Criteria	Excellent 10 points	Average 8-9	Unacceptable 0-7 points	Points Earned
<ul style="list-style-type: none"> Does any of the client's past medical history contradict the use of this medication? 	Student showed knowledge why the client's past medical history would contradict the use of the medication(s).	Student provided answers to the question(s), but failed to answer all the questions and/or the answers provided were inaccurate. (For each medication this question is worth one point)	Student failed to answer question or Student provided answers to the question(s), but failed to answer all the questions and/or the answers provided were inaccurate. (For each medication this question is worth one point)	___/10
Criteria	Excellent 10 points	Acceptable 8-9 points	Unacceptable 0-7 points	Points Earned
<ul style="list-style-type: none"> What is the indication for use of this medication based on the client's past medical history? (If unable to 	Student showed knowledge of medications and what conditions corresponds	The student provided appropriate indications for some of the medications, but failed to capture all of the appropriate indications for use. (For each medication this	Student failed to answer the question or The student provided appropriate indications	___/10

<p>determine an indication based on past medical history, please list potential indications for use of the medication in general)</p>	<p>with medications</p>	<p>question is worth one point)</p>	<p>for some of the medications, but failed to capture all of the appropriate indications for use. (For each medication this question is worth one point)</p>	
<p>Criteria</p>	<p>Excellent 20 points</p>	<p>Acceptable 16-19 points</p>	<p>Unacceptable 0-15 points</p>	<p>Points Earned</p>
<p>What would you teach the client about taking this medication?</p> <ul style="list-style-type: none"> • What education is needed for the medication? (For each medication listed the student must prioritize two topics for client education) <p>(You must consider all component(s) of the medication list when answering this question... if there are potential interactions</p>	<p>Student showed the importance of medication education, and appropriate prioritized client education for the scenario provided.</p>	<p>The student provided some appropriate education for the client, but failed to capture all of the appropriately prioritized education for the client. (Each topic of education is worth one point)</p>	<p>Student failed to answer the question OR The student provided some appropriate education for the client, but failed to capture all of the appropriately prioritized education for the client. (Each topic of education</p>	<p>___/20</p>

<p>with other medication this may be a priority over general education for this one medication)</p>			<p>is worth one point)</p>	
<p>Criteria</p>	<p>Excellent 10 points</p>	<p>Acceptable 8-9 points</p>	<p>Unacceptable 0-7 points</p>	<p>Points Earned</p>
<p>Is there anything about this medication regimen/ scenario that might indicate a potential difficulty in maintaining compliance with the orders as listed?</p> <ul style="list-style-type: none"> • Why would the patient have difficulty maintaining the medication regiment? <p>(Please consider all factors in the scenario and all information provided within your chart - including cost, insurance, frequency of administration, etc)</p>	<p>Student had knowledge on why a patient would have difficulty with medication regiment</p>	<p>The student indicated some potential reasons that the client may have difficulty, however the student failed to indicate a reason OR an appropriate reason for some of the medications (This question is worth one point for each medication)</p>	<p>Student failed to answer the question OR the student indicated some potential reasons that the client may have difficulty, however the student failed to indicate a reason OR an appropriate reason for some of the medications (This question is worth one point for each medication)</p>	<p>___/10</p>
<p>Criteria</p>	<p>Excellent</p>	<p>Acceptable</p>	<p>Unacceptable</p>	<p>Points</p>

	10 points	8-9 points	le 0-7 points	Earned
<p>Is there anything about this medication regimen/ scenario that might assist the client in maintaining the medication regimen as ordered?</p> <ul style="list-style-type: none"> What factors are present to remain compliant? <p>(Please consider all factors in the scenario and all information provided within your chart - including cost, insurance, frequency of administration, etc.)</p>	<p>Student had knowledge on medication compliance</p>	<p>The student answered the question appropriately for some of the medications but failed to indicate all of the factors that are present that assist with compliance. (This question is worth one point for each medication)</p>	<p>Student failed to answer the question OR The student answered the question appropriately for some of the medications but failed to indicate all of the factors that are present that assist with compliance. (This question is worth one point for each medication)</p>	<p>___/10</p>
Criteria	Excellent 10 points	Acceptable 8-9 points	Unacceptable 0 points	Points Earned
<ul style="list-style-type: none"> How much would this medication cost per month if the patient were to pay for them out of pocket? (best assessment based off of research) 	<p>Student showed research on medication costs</p>	<p>The student provided accurate research for some of the medications, but failed to provided research for all medications (This question is worth one point for each medication, with the total cost being worth 5</p>	<p>Student failed to answer the question OR The student provided accurate research for some of the medications,</p>	<p>___/15</p>

<ul style="list-style-type: none"> What would the client's monthly out of pocket expense for all 10 medications? 		points)	but failed to provided research for all medications (This question is worth one point for each medication, with the total cost being worth 5 points)	
Criteria	Excellent 20 points	Acceptable 16-19 points	Unacceptab le 0-15 points	Points Earned
<p>The student must appropriately format the paper and include all of the following:</p> <ul style="list-style-type: none"> Entire document must include appropriate citations, reference page, title page, page numbers, running head, all with appropriate formatting per APA (10 points – each missing or inaccurate portion per APA 	<p>The document included a title page, the rubric, the client scenario, a reference page which included five references that were cited within the document. APA formatting was</p>	<p>The document did not meet all of the criteria for formatting/ referencing. See “criteria” to the left for further breakdown.</p>	<p>The document did not meet all of the criteria for formatting/ referencing. See “criteria” to the left for further breakdown.</p>	<p>___/20</p>

<p>is worth one point)</p> <ul style="list-style-type: none"> • The student provided a rubric attached for grading (3 points) • The student included the provided client scenario on page two of the document (2 points) • The paper included a minimum of five references which were cited within the document (each reference with one citation is worth 5 points) 	<p>consistent with the APA manual.</p>			
Criteria	Excellent 20 points	Acceptable 16-19 points	Unacceptable 0-15 points	Points Earned
<p>What suggestions might you make to the prescriber and/or client (or questions you might ask the prescriber) to help this client scenario? (think about decreasing the</p>	<p>The student was able to identify one potential idea or question to present to the</p>	<p>The student was able to identify one potential idea or question to present to the prescriber or client, however there was a much higher priority question/suggestion/iss</p>	<p>The student failed to answer the question OR the student answered the question, however the</p>	<p>___/20</p>

<p>potential for interaction(s) through medication reduction, other potential medications, diet changes, lifestyle changes, etc)</p> <p>Elaborate on this, explaining why you feel it should be addressed, why it is priority and provide evidence behind your presentation.</p>	<p>prescriber or client. This question showed evidence of good critical thinking.</p>	<p>ue within the scenario that should have been addressed.</p>	<p>students answer was dangerously inaccurate.</p>	
<p>Criteria</p>	<p>Excellent 10 points</p>	<p>Acceptable 8-9 points</p>	<p>Unacceptable 0-7 points</p>	<p>Points Earned</p>
<ul style="list-style-type: none"> • Reflective statement of experience should include the following: <ul style="list-style-type: none"> -insight into the project itself (a specific example within the project and its implications) -A basic understanding of polypharmacy -A reflection on this student nurses role in 	<p>The students provided reflection showed good insight into the project itself, polypharmacy, and the nurses role in client advocacy</p>	<p>The student provided a reflection, however the reflection lacked one of the following</p> <ul style="list-style-type: none"> -insight into the project itself (a specific example within the project and its implications). -A basic understanding of polypharmacy -A reflection on this student nurses role in this scenario as a client advocate/educator/care 	<p>Student failed to reflect on their project OR the student addressed only of the topics of reflection</p>	<p>___/10</p>

this scenario as a client advocate/educator/car egiver		giver		
Total Points				<u> </u> /200