

Polypharmacy Project

Kathleen Serrano, BSN Student

N322 Introduction to Pharmacology

Lakeview College of Nursing

Brittany Lawson MSN, RN

April 06, 2021

Polypharmacy Case 11

Patient: Victoria is an 84-year-old female that lives on her own. Her daughter does visit her one time a week – however, she lives 35 miles away and cannot visit more frequently due to her home and work commitments. Victoria does have a home health care worker that visits once a day in the morning to assist with bathing, dressing, cooking breakfast, and taking her morning pills.

Social History: Victoria has a history of smoking cigarettes (1/2 pack per day for 40 years). She quit smoking cigarettes 5 years ago at the urging of her daughter but does occasionally use a vape pen. No history of alcohol or illicit drug use.

Medical hx: hypertension, rheumatoid arthritis, and high cholesterol

Wt 120 pounds Ht 5ft 2in

Allergies: ASA, Latex, Shellfish

Medications:

Bendroflumethiazide 2.5 mg daily

Benazepril 10 mg by mouth daily

Simvastatin 40 mg at night

Methotrexate 20 mg once weekly on a Wednesday

Folic acid 5 mg daily except on Wednesday

Acetaminophen 1 g four times daily when needed.

Trimethoprim 200 mg twice daily for 3 days for UTI (recent ED visit)

Ezetimibe 10 mg by mouth once daily

Xanax 1 mg BID as needed

Zolpidem 10 mg at bedtime for sleep

<p>Drug #1</p> <p>Drug Class: Thiazide diuretic/antihypertensive</p>	<p>Drug Name (Generic): bendroflumethiazide-nadolol</p> <p>Drug Name (Trade): Corzide</p> <p>(Prescribers Digital Reference [PDR], 2021a)</p>
<p>How is the medication taken: (include dose, route, and frequency)</p>	<p>2.5 mg of bendroflumethiazide and 20 mg of nadolol is taken by mouth once daily; it is recommended to take in the morning.</p>
<p>Specific Directions not included above:</p>	<p>Bendroflumethiazide can be taken with or without food, and it is recommended to take this drug four hours before bedtime as it can cause the urge to urinate. However, taking this medication in the morning may be preferred especially if the urge to urinate occurs after administration (PDR, 2021a).</p>
<p>Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)</p>	<p>Bendroflumethiazide interacts with Benazepril. Both bendroflumethiazide and benazepril are antihypertensive medications that when co-administrated may cause a decreased blood pressure (PDR, 2021a).</p>
<p>Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)</p>	<p>Bendroflumethiazide does not have any major lifestyle interactions. In rare cases, alcohol consumption may cause dizziness or lightheadedness in client's on bendroflumethiazide (PDR, 2021a). If this interaction occurs, it is recommended to not drink alcohol. Victoria has no history of alcohol use under her social history and has no other lifestyle interactions with bendromethiazide.</p>

Does any of the client's past medical history contradict the use of this medication?	No, there are no medical conditions listed in the client's past medical history that contradict the use of bendroflumethiazide.
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 for use of bendroflumethiazide in the client's past medical history is hypertension, or high blood pressure.
What would you teach the client about taking this medication?	I would educate the client about the potential minor interaction of bendroflumethiazide and benazepril as both are antihypertensive drugs. Also, I would educate the client about taking bendroflumethiazide in the morning or at least four hours before bedtime to prevent the urge to urinate at bedtime or while asleep (PDR, 2021a).
How much would medication cost per month if paying out of pocket?	The average cost per month of bendroflumethiazide-nadolol if paying out pocket for a thirty-day supply would be \$69.90 (Good Rx, 2021a).

Drug #2	Drug Name (Generic): benazepril
----------------	--

Drug Class: Angiotensin-converting enzyme (ACE) inhibitor/antihypertensive	Drug Name (Trade): Lotensin
How is the medication taken: (include dose, route, and frequency)	10 mg of benazepril is taken by mouth once daily
Specific Directions not included above:	Benazepril may be taken with or without food. Food may delay the peak concentration of the drug, but not the absorption (PDR, 2021b).
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	Benazepril interacts with bendroflumethiazide. Both benazepril and bendroflumethiazide are antihypertensive medications that when co-administrated may cause a decreased blood pressure. Benazepril interacts with trimethoprim. Trimethoprim may enhance the hyperkalemic effect that ACE inhibitors like Benazepril can cause (PDR, 2021b).
Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)	There is no lifestyle interaction with Benazepril listed on Victoria's medical or social history.
Does any of the client's past medical history contradict the use of this medication?	No, Victoria's past medical history does not contradict the use of Benazepril.
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	The indication for use of Benazepril based on the client's past medical history is hypertension.

history, please list potential indications for use of the medication in general)	
What would you teach the client about taking this medication?	I would educate the client about avoiding high potassium foods like bananas, spinach, and dates to prevent hyperkalemia with known interaction between benazepril and trimethoprim. Secondly, I would educate the client about persistent, non-productive cough which is a common adverse side effect of benazepril (PDR, 2021b).
How much would medication cost per month if paying out of pocket?	Benazepril would cost \$15.12 per month if paying out of pocket for a thirty-day supply (Good Rx, 2021b).

<p>Drug #3</p> <p>Drug Class: HMG-CoA reductase inhibitor/statin/cholesterol lowering</p>	<p>Drug Name (Generic): simvastatin</p> <p>Drug Name (Trade): Zocor</p>
<p>How is the medication taken: (include dose, route, and frequency)</p>	<p>40 mg of simvastatin is taken by mouth once every night (PDR, 2021c).</p>
<p>Specific Directions not included above:</p>	<p>Avoid taking simvastatin with grapefruit juice to avoid a potential increase in drug serum concentrations (NLM, 2021).</p>
<p>Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)</p>	<p>No, simvastatin does not interact with any other medications on this list.</p>
<p>Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)</p>	<p>While taking simvastatin, clients should minimize the consumption of alcohol and should be avoided in clients with alcoholism. However, Victoria has no lifestyle interactions as there is no social history of alcohol use (PDR, 2021c).</p>
<p>Does any of the client's past medical history</p>	<p>No, the client's past medical history does not contradict the use of simvastatin.</p>

contradict the use of this medication?	
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)	Simvastatin is used based on the client's past medical history of high cholesterol.
What would you teach the client about taking this medication?	I would educate the client about avoiding grapefruit juice altogether as it may cause an increase in simvastatin serum concentrations. Also, I would educate the client that the reason simvastatin is recommended to take at night is due to cholesterol synthesis peaking in the early morning (PDR, 2021c), (NLM, 2021a).
How much would medication cost per month if paying out of pocket?	Simvastatin would cost \$27.59 per month if paying out of pocket for a thirty-day supply (Good Rx, 2021c).

<p>Drug #4</p> <p>Drug Class: Folate</p> <p>antagonist/antimetabolite/antirheumatic</p>	<p>Drug Name (Generic): methotrexate</p> <p>Drug Name (Trade): Trexall</p>
<p>How is the medication taken: (include dose, route, and frequency)</p>	<p>20 mg of methotrexate is taken by mouth once a week on Wednesdays</p>
<p>Specific Directions not included above:</p>	<p>Methotrexate has no other specific directions. However, there are alternative formulations.</p>
<p>Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)</p>	<p>Methotrexate interacts with trimethoprim as trimethoprim can enhance the adverse and toxic hematologic effects of methotrexate (PDR, 2021d).</p>
<p>Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)</p>	<p>Methotrexate interacts with ETOH consumption, alcoholism, and acute or chronic liver disease. However, this client has no history of alcohol consumption listed in her social history.</p>
<p>Does any of the client's past medical history contradict the use of this medication?</p>	<p>No, the client's past medical history does not contradict the use of methotrexate.</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</p>	<p>Methotrexate is indicated based on the client's past medical history of rheumatoid arthritis.</p>

history, please list potential indications for use of the medication in general)	
What would you teach the client about taking this medication?	I would teach the client that due to her older age (84 years old) she is at increased risk for methotrexate toxicity due to potential decreased renal and hepatic function. Secondly, I would educate the patient that methotrexate may increase photosensitivity and that the patient should avoid prolonged sun exposure, wear sunscreen, and wear protective clothing (PDR, 2021d).
How much would medication cost per month if paying out of pocket?	Methotrexate would cost \$92.77 per month if paying out of pocket for a thirty-day supply (Good Rx, 2021d).

Drug #5	Drug Name (Generic): folic acid (Folate- Vitamin B9)
Drug Class: B-complex vitamin/derivative supplement	Drug Name (Trade): FA-8
How is the medication taken: (include dose, route, and frequency)	5 mg of folic acid is taken by mouth once daily except on Wednesdays (PDR, 2021e)
Specific Directions not included above:	No there are not any other specific directions not included for folic acid.
Does this medication interact with any other medication(s) on this list? (see rubric for further	No, folic acid does not interact with any other medication on this list.

instruction)	
Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)	No there are not lifestyle interactions that pertain to the client or the client's social history.
Does any of the client's past medical history contradict the use of this medication?	No, the client's past medical history does not contradict the use of folic acid.
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)	Methotrexate administration and use is the indication for the use of folic acid in this client. However, since there is no other indication based on the client's past medical history other indications for folic acid administration are anemia, sickle cell disease, and general folate deficiency.
What would you teach the client about taking this medication?	I would educate the patient that it is important for folic acid to be taken to minimize hematologic effects including folic acid deficiency due to methotrexate use. Also, I would educate the patient that folic acid (Vitamin B9) can mask the deficiency of Vitamin B12, which will be important to monitor when taking folic acid (PDR, 2021e).
How much would medication cost per month if paying out of pocket?	Folic acid would cost \$57.80 per month if paying out of pocket for a thirty-day supply (Good Rx, 2021e).

Drug #6	Drug Name (Generic): acetaminophen
Drug Class: Nonsalicylate/non-opioid analgesic	Drug Name (Trade): Tylenol
How is the medication taken: (include dose, route, and frequency)	1 g (1,000 mg) of acetaminophen is taken by mouth four times a day when needed (Jones & Bartlett, 2020).
Specific Directions not included above:	Do not exceed 4 g (4,000 mg) of acetaminophen per day (Jones & Bartlett, 2020).
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	No, acetaminophen does not interact with any other medication on this list.
Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)	Alcohol use is a lifestyle interaction when taking acetaminophen. However, Victoria has no social history of alcohol use; therefore, she has no lifestyle interactions with acetaminophen.
Does any of the client's past medical history contradict the use of this medication?	No, the client's past medical history does not contradict the use of acetaminophen.
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 for use of acetaminophen is unclear but based on the client's past medical history may be used for pain related to rheumatoid arthritis. Other indications for use of acetaminophen are osteoarthritis and fever.

What would you teach the client about taking this medication?	I would educate the patient about not exceeding 4 g or 4,000 mg of acetaminophen per day. Also, I would educate the patient to avoid alcohol consumption if concurrently using as this may impair liver function (Jones & Bartlett, 2020).
How much would medication cost per month if paying out of pocket?	Acetaminophen would cost \$3.16 per month if paying out of pocket for a thirty-day supply.

Drug #7 Drug Class: Antibiotic	Drug Name (Generic): trimethoprim Drug Name (Trade): Primsol
How is the medication taken: (include dose, route, and frequency)	200 mg of trimethoprim is taken by mouth twice daily for 3 days
Specific Directions not included above:	When taking trimethoprim, make sure to complete the full course of treatment. If stomach irritation occurs, administer trimethoprim with food (PDR, 2021f).
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	Methotrexate interacts with trimethoprim as trimethoprim can enhance the adverse and toxic hematologic effects of methotrexate (PDR, 2021f).
Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)	There are no lifestyle interactions with trimethoprim, or any interactions that may occur because of the client's social history (NLM, 2021b).

Does any of the client's past medical history contradict the use of this medication?	No, the client's past medical history does not contradict the use of trimethoprim.
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 for use of trimethoprim is the recent ED visit due to a urinary tract infection (UTI) based on the client's past medical history (NLM, 2021b).
What would you teach the client about taking this medication?	I would educate the client on completed the full course of treatment. Also, I would educate the client on the potential interaction between trimethoprim and methotrexate, which can lead to trimethoprim enhancing the adverse and toxic hematologic effects of methotrexate (PDR, 2021f).
How much would medication cost per month if paying out of pocket?	Trimethoprim would cost \$4.23 per month if paying out of pocket for a thirty-day supply (Good Rx, 2021f).

Drug #8	Drug Name (Generic): ezetimibe
----------------	---------------------------------------

Drug Class: cholesterol absorption inhibitor/sterol transporter inhibitor/antilipemic	Drug Name (Trade): Zetia
How is the medication taken: (include dose, route, and frequency)	10 mg of ezetimibe is taken by mouth once daily
Specific Directions not included above:	Ezetimibe is more effective in improving serum total cholesterol when administrating with an HMG-CoA reductase inhibitor like simvastatin, which the patient is currently taking. While on ezetimibe, the client should be put on a cholesterol lowering diet through the entire course of therapy (PDR, 2021g).
Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	No, ezetimibe does not interact with any other medications on this list.
Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)	If the patient has a high cholesterol diet this could be a potential lifestyle interaction with ezetimibe. It is unclear and undocumented what the client's diet is.
Does any of the client's past medical history contradict the use of this medication?	No, ezetimibe does not contradict the client's past medical history.
What is the indication for use of this medication based on the client's past medical history? (If unable	The indication for the use of ezetimibe is the client's past medical history of high cholesterol.

to determine an indication based on past medical history, please list potential indications for use of the medication in general)	
What would you teach the client about taking this medication?	I would educate the client on avoiding high fat and high cholesterol foods as this may impair the effectiveness of ezetimibe in lowering cholesterol. Also, I would educate the patient on monitoring and reporting any odd and unexplained muscle pain, tenderness, or muscle weakness (PDR, 2021g).
How much would medication cost per month if paying out of pocket?	Ezetimibe would cost \$110.84 per month if paying out of pocket for a thirty-day supply (Good Rx, 2021g).

Drug #9 Drug Class: benzodiazepine/anxiolytics	Drug Name (Generic): xanax Drug Name (Trade): Alprazolam
How is the medication taken: (include dose, route, and frequency)	1 mg of Xanax taken by mouth twice daily as needed
Specific Directions not included above:	May be administered with or without food. If the client is taking extended-release tablets, do not chew, break or crush; the client should take the extended-release tablets preferably in the morning with a full glass of water (PDR, 2021h).

Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)	Xanax interacts with zolpidem as both are CNS depressants, both may enhance the adverse effects of both medications such as CNS depression and impairment (PDR, 2021h).
Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)	Avoid ETOH consumption; however, this is not an issue for the client, as the client has no social history of alcohol consumption.
Does any of the client's past medical history contradict the use of this medication?	Yes, due to the client's age of 84 years clearance and elimination of alprazolam is reduced, which can potentially intensify or prolong adverse reactions of xanax like respiratory depression (PDR, 2021h).
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)	Based on the client's past medical history there is no indication for use of xanax. However, some potential indications of general use of xanax are various types of anxiety, panic disorder, or mood-symptoms associated with premenstrual dysphoric disorder (PDR, 2021h).
What would you teach the client about taking this medication?	I would educate the client about the increase of adverse effects of Xanax due to being 84 years old such as severe drowsiness, dizziness, confusion, and unsteadiness.
How much would medication cost per month if paying out of pocket?	Xanax would cost \$16.57 per month if paying out of pocket for a thirty-day supply (Frandsen & Pennington, 2020).

<p>Drug #10</p> <p>Drug Class: non-benzodiazepine/benzodiazepine receptor agonists (NBRA)s</p>	<p>Drug Name (Generic): zolpidem</p> <p>Drug Name (Trade): Ambien</p>
<p>How is the medication taken: (include dose, route, and frequency)</p>	<p>10 mg of zolpidem is taken by mouth at bedtime</p>
<p>Specific Directions not included above:</p>	<p>The recommended geriatric dose is 5 mg daily by mouth. Take zolpidem on an empty stomach to aid in the onset of sleep. Store this medication at a controlled room temperature (PDR, 2021i).</p>
<p>Does this medication interact with any other medication(s) on this list? (see rubric for further instruction)</p>	<p>Zolpidem interacts with xanax as both are CNS depressants, both may enhance the adverse effects of both medications such as CNS depression and impairment (PDR, 2021i).</p>
<p>Lifestyle interactions: (Daily tobacco use, alcohol, drugs, etc.)</p>	<p>ETOH or alcohol consumption should be avoided while taking zolpidem. However, this should not be an issue for the client as the client has no social history of alcohol consumption.</p>
<p>Does any of the client's past medical history contradict the use of this medication?</p>	<p>No, the client's past medical history does not contradict the use of zolpidem.</p>
<p>What is the indication for use of this medication based on the client's past medical history? (If unable</p>	<p>The indication for zolpidem use is unclear based on the client's past medical history. Other indications for zolpidem use are insomnia, difficulty with sleep initiation or onset, middle-of-</p>

to determine an indication based on past medical history, please list potential indications for use of the medication in general)	the night awakening, and difficulty falling back asleep (PDR, 2021i).
What would you teach the client about taking this medication?	I would educate the client on taking zolpidem on an empty stomach to facilitate the onset or initiation of sleep. Also, I would teach the client that zolpidem interacts with xanax since both are CNS depressants, and could potentially enhance the adverse effects of both medications.
How much would medication cost per month if paying out of pocket?	Zolpidem would cost \$53.76 per month if paying out of pocket for a thirty-day supply (Good Rx, 2021h).

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

The patient has a past medical history of rheumatoid arthritis, which often affects the joints of the hand (Frandsen & Pennington, 2020). Rheumatoid arthritis may make it difficult for the client to open pill bottles, especially for ten different medications. This may cause the patient to not take all of the prescribed medications, which could lead to adverse outcomes depending on the severity of her hypertension and high cholesterol. Another difficulty with the patient's regimen is that not all of the medications are in the same unit of measurement. For example, acetaminophen is prescribed as 1 g four times daily when needed. Having acetaminophen in grams and the rest of the medications in milligrams may confuse the patient and potentially cause a miscalculation or even overdose. It would be best if 1 g was correctly converted to 1,000 mg to lessen the chance of confusion and medication error for the patient. Side effects of medications may affect the patient's adherence to the medication regimen whether the side effects are real or perceived. Also, the dosing and frequency in general can create potential difficulty in maintaining compliance with the orders as listed. The differing schedule, frequency and timing of medications, such as those that need to be taken twice daily, just at night or bedtime, in the morning, or once a week, may make it more difficult to manage for the patient, as well.

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

Most of the medications can be administered in the morning except for the simvastatin and zolpidem, which should be taken at night and at bedtime. Taking the medications mostly in the morning would be most beneficial to the patient especially since there is a home health care worker to help in the morning with medication administration and possibly pillbox set up. The once Wednesday weekly dosing of the methotrexate might make it easier to take that one medication given it is taken just one time per week; however, that can also be an opportunity for error if someone was to take that medication every day.

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.)

I would ask the provider why the patient was prescribed Xanax and zolpidem given there is no listed indication for either medication in the patient's past medical history. In consulting drug references, the combination of Xanax and zolpidem may place this 84-year-old female patient at risk for enhanced central nervous depression and possibly increase risk for falls (PDR, 2021h). I might suggest to the prescriber to consider discontinuing the prescriptions for Xanax and zolpidem given there are indications for use and in concern for the possible drug interaction. In addition, I would question why the zolpidem is ordered as 10 mg, as this is the highest

dose, and recommended daily dosing for geriatric patients is 5 mg maximum (PDR, 2021i). In addition, another suggestion might be to understand why two medications are needed for cholesterol lowering, the simvastatin and ezetimibe are prescribed for this condition; maybe this can be simplified to just one cholesterol medication, versus having two medications for the same indication. Another suggestion to the provider would be to try and have all medications moved to the morning and maybe to have the frequency lowered for a majority of the medications to one dosage in the morning. This may greatly help the client in maintaining the medication regimen and avoid confusion or errors.

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

The client's, Victoria's monthly out of pocket expense for all 10 medications would be \$458.11. However, if the patient has insurance coverage, Medicare coverage, or with use of some prescription coupons, the cost may be less than that out-of-pocket cost.

Reflective Statement of Experience:

This project showed me the importance of identifying that every medication correlates with a specific indication for a patient's diagnosis. I was able to decipher a few medications on this patient's profile that did not have an indication for use. Also, I was able to identify a few important potential medication interactions that might be clinically important for this patient's care. For example, Victoria has no medical history noted for anxiety or insomnia that would necessitate prescriptions for Xanax and zolpidem, respectively. Therefore, this patient should be reevaluated for appropriateness of Xanax and zolpidem prescribing. Another aspect for insight on this project, is the fact that there was no laboratory or diagnostic data provided. Lab data is always imperative to have

especially when evaluating a patient's medication list to make sure that medications are showing effectiveness and for safety reasons, too. Throughout time at Lakeview College of Nursing, polypharmacy has been a specific topic discussed from foundations of nursing to pharmacology. Polypharmacy, or the use of several medications to treat one or more medical conditions like this specific case study with Victoria, is a prevalent issue especially affecting the geriatric population (Frandsen & Pennington, 2020). Older adults are more likely to be prescribed multiple medications due to their body's not functioning as well or various ailments like rheumatoid arthritis, and other chronic medical conditions. Due to this, the establishment of tools like BEERS criteria has been implemented for older adults to prevent drug interactions and identify high risk medications for the older population (Basgut et al., 2019). Polypharmacy is a major issue that affects adults and geriatric patient populations, as seen in completing this project. I learned that so many medications may interact, and that they have differing levels of impact and importance, ranging from minor to major. It is truly eye opening given all the medication interactions not only with other prescription medications on the regimen, but other over the counter drugs, herbal substances, and even foods or drinks like grapefruit juice.

References

Basgut, B., Khamis, S., Abdi, A. M., & Uzan, A. (2019). Applying Beers Criteria for elderly patients to assess rational drug use at a university hospital in Northern Cyprus. *Journal of Pharmacy and Bioallied Sciences*, 11(2).

https://doi.org/10.4103/jpbs.jpbs_208_18

Frandsen, C. & Pennington, S. S. (2020). *Abrams' clinical drug therapy: Rationales for nursing practice* (12th ed.). Lippincott, Williams, Wilkins.

Good Rx, Inc. (2021a). *Corzide*. Retrieved March 31, 2021, from <https://www.goodrx.com/corzide>

Good Rx, Inc. (2021b). *Benazepril*. Retrieved March 31, 2021, from <https://www.goodrx.com/benazepril>

Good Rx, Inc. (2021c). *Simvastatin*. Retrieved March 31, 2021, from <https://www.goodrx.com/simvastatin>

Good Rx, Inc. (2021d). *Methotrexate*. Retrieved March 31, 2021, from <https://www.goodrx.com/methotrexate>

Good Rx, Inc. (2021e). *Folic acid*. Retrieved March 31, 2021, from <https://www.goodrx.com/folic-acid>

Good Rx, Inc. (2021f). *Trimethoprim*. Retrieved March 31, 2021, from <https://www.goodrx.com/trimethoprim>

Good Rx, Inc. (2021g). *Ezetimibe*. Retrieved March 31, 2021, from <https://www.goodrx.com/trimethoprim>

Good Rx, Inc. (2021h). *Zolpidem*. Retrieved March 31, 2021, from <https://www.goodrx.com/zolpidem>

Jones & Bartlett Learning. (2019). *2020 Nurse's drug handbook* (19th ed.). Jones & Bartlett Learning.

Prescribers Digital Reference (PDR). (2021a). *Bendroflumethiazide*. Retrieved March 31, 2021, from <https://pdr.net/drug-summary/Corzide-bendroflumethiazide-nadolol-1486>

Prescribers Digital Reference (PDR). (2021b). *Benazepril*. Retrieved March 31, 2021, from <https://pdr.net/drug-summary/Lotensin-benazepril-hydrochloride-1006.8403>

Prescribers Digital Reference (PDR). (2021c). *Simvastatin*. Retrieved March 31, 2021, from <https://m.pdr.net/Mobile/Pages/drug-summary/Zocor-simvastatin-402.3285>

Prescribers Digital Reference (PDR). (2021d). *Methotrexate*. Retrieved March 31, 2021, from <https://pdr.net/drug-summary/Trexall-methotrexate-3176.8345>

Prescribers Digital Reference (PDR). (2021e). *Folic acid*. Retrieved March 31, 2021, from <https://pdr.net/drug-summary/Folic-Acid-Tablets-folic-acid-1634.65>

Prescribers Digital Reference (PDR). (2021f). *Trimethoprim*. Retrieved March 31, 2021, from <https://pdr.net/drug-summary/Primsol-trimethoprim-hydrochloride-832>

Prescribers Digital Reference (PDR). (2021g). *Ezetimibe*. Retrieved March 31, 2021, from <https://pdr.net/drug-summary/Zetia-ezetimibe-401.816>

Prescribers Digital Reference (PDR). (2021h). *Xanax*. Retrieved March 31, 2021, from <https://pdr.net/drug-summary/Xanax-alprazolam-1873.31>

Prescribers Digital Reference (PDR). (2021i). *Zolpidem*. Retrieved March 31, 2021, from <https://pdr.net/drug-summary/Ambien-zolpidem-tartrate-2515.8323>

U.S. National Library of Medicine (NLM). (2021a). *Simvastatin*. Retrieved March 31, 2021, from <https://medlineplus.gov/druginfo/meds/a692030.html#why>

U.S. National Library of Medicine (NLM). (2021b). *Trimethoprim*. Retrieved March 31, 2021, from <https://medlineplus.gov/druginfo/meds/a684025.html#why>